UNIVERSITY OF LONDON

UNIVERSITY COLLEGE ANNUAL REPORT 1973-1974

UNIVERSITY COLLEGE
LONDON

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FOREWORD BY THE PROVOST

LIVING IN DEFICIT

British universities are facing a sombre reversal in their fortunes. The financial cramp now gripping them is by far the most serious malady which they have experienced since the days of the Second World War. They have known the indigestion which stop-go policies have caused in the past; and from these they have recovered. Undoubtedly the years 1968–71 were difficult; but Sir Kenneth Berrill was able to remove the obstruction to the flow of supplementary payments for inflation and the settlement for the new quinquennium appeared to offer hope of a reasonably paced expansion. Then last year it became clear that the expansion was going to be curtailed and, although in the autumn of 1974 universities admitted more students than ever before, anyone at all prescient must have recognised that the days of growth such as universities have become accustomed to in the past fifteen years were over. To-day not merely is growth over: the universities are facing contraction.

The question is: can they continue to operate after this year without making numbers of staff redundant? That shows how grave the situation is.

University finance is now in ineluctable confusion. In withholding the whole of the supplementary grant to compensate for inflation in 1974–75 Government has set the universities on a greasy slide: the worse inflation becomes, the worse their deficit will be. It is a cut of a particularly disastrous kind. If you do not know the rate of inflation, you cannot plan to meet it rationally. Had the universities been told that their recurrent grant was to be cut by such a percentage they would have known where they stood. Instead they scarcely know whether they are on their heads or their heels. Inflation in the Tress/Brown index ran at over 17 per cent in the twelve months to July 1974, and it looks as if by the end of the forthcoming year the College will have an on-going deficit of some £400,000.

No-one really knows what such deficits mean. No-one knows what the Government will be able to do for universities between 1975 and 1977. Will they receive full supplementation for inflation or 50 per cent—or nil? Will they have their recurrent grant cut because the targets for the expansion of student numbers have been cut? In the circumstances these are idle questions. Like many businesses universities are faced with the problem of cash flow. There would be the

gravest difficulties in realising any of their assets. The University Grants Committee cannot forecast what, if anything, can be done to relieve the situation where every university is in deficit. In most cases whatever savings can be made cannot begin to bring us back into balance.

Why should the deficit be so large? The reasons are simple. Universities cannot avoid paying out much more than they will receive in compensation from the UGC reserves. Many costs are up, oil heating in particular. While the UGC provides extra funds for increased salaries and for the London Weighting award for academic staff, we are supposed to meet the wage bill increased by threshold arrangements and the London Weighting award for non-academic staff from the fixed block grant, which is not large enough to cover the cost. All the unions make claims for higher wages to try to maintain their present standard of living, at a time when the terms of trade and the balance of payments no longer resemble those of the early nineteen-sixties when that standard was attained. For instance the ASTMS, who represent the technicians, put in a claim for a 30 per cent increase in wages; they got 11 per cent and, in addition, threshold payments. It is interesting to note how the rise in technicians' wages in recent years has out-distanced rises for academic staff and other employees.

Between 1969 and 1974, increases in remuneration, exclusive of threshold arrangements and London Allowances, have amounted on an average to approximately 100 per cent for technicians and between 55 and 60 per cent for academic staff and secretarial and clerical staff. The country is moving into the age of syndicalism, and those professions which do not recognise it will find themselves reduced to moonlighting. Does this country want to follow the poorer European countries and those in South America where academic staff take two jobs to the detriment of their students and of their duty to increase knowledge? The Vice-Chancellors must fight for the legitimate interests of their colleagues—for Vice-Chancellors are part of the academic staff—as trade union bosses do for their members. So should the AUT. Perhaps they might take a leaf out of the ASTMS book and press for a restructuring exercise for their members?

Living with the Deficit

What are we to do about this? Moan?

Moaning is a dreary way of relieving feelings. The first thing to do is to count whatever blessings are at hand. There is one for which

in London we should surely be thankful. The plight of postgraduates in London University has at last been recognised as little short of scandalous. The postgraduates were the one group in the University which had no London differential. Undergraduates in London got more than their fellows in the provinces: so did academic and technical staff. Postgraduates suffered real hardship because they were forbidden by the terms of their grant to earn more than a limited amount as they were deemed to be working full-time. This anomaly has now been remedied and a 38 per cent increase in the grant has raised it from £695 to £960, of which £80 is accounted for by London Weighting.

It is worthwhile pausing to ask why the plea for London postgraduates succeeded. It succeeded because their case was argued with the Department of Education and Science in the greatest possible detail and with the greatest possible thoroughness at every governmental level: to the UGC, to the senior civil servant in charge of the estimates for higher education, to the Permanent Secretary, to the Secretary of State and the Ministers in the former Conservative Government and to their successors in the Labour Government. No opportunity was let slip of producing facts and figures to justify the case; and it was because of the logic of the case that, even at a time when the DES was having to impose economies of a kind unheard of in post-war years, the pile of evidence convinced all levels of Government that something had to be done. But if it is true that by patient and exhaustive explanation an outstanding anomaly can be eliminated, it has also to be recognised that many cases which both academic staff and students continue to put forward have little chance of success in the present situation even though they may appear clear enough. To-day almost any case seems justifiable—for higher grants for vacation study, for maintaining the present level of research activity, for remedying the notoriously bad conditions of student union life in London. But none of these has a chance of success unless some gross anomaly or injustice can be adduced. The moral is that Government is still sensitive to injustice, but the financial remedies in its hand are exceedingly few.

There is good reason to believe that it was the pressure applied month after month by the rational arguments of the Vice-Chancellors' Committee, rather than the demonstrations and idiotic sit-ins fomented by the National Union of Students, which led to the grant for undergraduate students being fixed at a level higher than that which it was feared the Government would choose. In London it rose from £520 to £665. But even though the grant is to be reviewed

annually, inflation erodes it so quickly that this grant, which was negotiated in the spring and was then some £40–£60 below what universities believed a 'full' grant would be, is now £100 short. This is why the NUS is calling for more demonstrations to agitate for a higher grant and for more occupations and sit-ins. The NUS is foolish. Disruption is counter-productive. It alienates public opinion at the very time when students need all the public support they can get.

Yet, however unfashionable it may be, we ought to look some hard facts in the face. There never has been a 'full' grant at any time during the past ten years: each time the maintenance grant has been fixed at a new level there has been a protest that it is inadequate. In 1971 the Committee of Vice-Chancellors as well as the NUS declared that it was too low, and as inflation made it even lower the Vice-Chancellors appealed to the principles of the Anderson Report. That Report did indeed argue that the level of the grant should be adequate, but it never defined the criteria for measuring adequacy. Inevitably, the Government alone can take the final decision as to what degree of 'adequacy' the country can afford. When the Secretary of State set student maintenance grants at their new level, he made it plain that, however much the Vice-Chancellors and the NUS might argue that the grant was inadequate to meet the charges which universities are obliged to fix for board and lodging, students were expected to pay these charges; and the UGC made it even plainer that universities were required to charge economic rents and realistic prices in their refectories. For the first time the DES almost overtly admitted that students are expected to earn in the vacations or to make up the shortfall by other means.

What has happened is that the State has now taken account of the fact that for years many students (but by no means all) have been earning considerable sums of money in the vacations. Perhaps the State has also taken account of the fact that some students do not spend their grant on the objects (board and lodging) for which it is given. Indeed they refuse to pay the legitimate costs which universities charge them. But perhaps it is nearer the mark to conclude that the State can no longer afford to maintain the vastly increased numbers of students in higher education at the level which it was reasonable to hope in 1961 could be achieved. Furthermore, while the grant may be inadequate, it remains true that it is more generous than the grant in France or West Germany, countries whose economies are stronger than our own. (On the other hand, in France students eat in heavily subsidised refectories in recompense for their lower grant.) The British students' basic grant is still the most generous in Europe—

which is one of the reasons why the proportion of students who are the children of manual workers is still higher than in other countries.

Expansion Gives Way to Contraction

We in the academic profession, no less than our students, will have to look some facts in the face. Last year the College deliberately maintained its programme of creating new posts in subjects where student demand was buoyant, at a time when numbers of universities were imposing a freeze on all new posts. Now, in the session 1974–75, we too have imposed a freeze. It is staff who absorb the vast proportion of our income, and we are going to reduce staff establishments by $2\frac{1}{2}$ per cent per annum (i.e. 5 per cent by the end of the quinquennium). Inflation does not permit us to make significant cuts in departmental grants and supplies—how can this be done when the price of a chemical essential to biochemical research has risen by 400 per cent? A freeze is an effective way of making cuts, but it is very crude. There are nearly always courses or duties which have to be performed and great hardship could fall on students if a key post falls vacant and the department is forbidden to find a replacement. It would be far better if Faculty groups could decide how best to effect these economies by adopting criteria which, however unwelcome, are felt in the main to be fair. The College has in fact been debating this problem for the past seven years. We are still some way from finding criteria. Over the past four years on average thirty academic posts have annually fallen vacant through resignation or retirement and the vast majority have been filled. The Vacancies Committee, which scrutinises every post, has been able to put certain posts into limbo, but until it adopts new criteria it cannot be expected to do much more. Most of the fat of the sixties has now been sweated off and the proceedings of the Committee last session were a monotonous acknowledgment that practically all the cases put up for the filling of vacancies were well argued and justified.

If that is so, are we deranged in imagining that departments can cut their staff posts by $2\frac{1}{2}$ per cent a year? In theory they can. But the average of thirty posts falling vacant each year may be diminished by the fact that other universities, in exactly the same difficulties as ourselves, will not be advertising for staff. Furthermore, vacancies all too rarely occur where they can most conveniently be left unfilled. Some of the posts which fall vacant have to be filled if an essential rôle in teaching or an essential service to support the running of a department is to be maintained. Anticipating trouble to come, we set up some five committees to look into the level of resources which

should be allocated to Physics and Chemistry, two of our largest and most expensive departments; to the School of Environmental Studies; to the Slade School; and to the Library. The first two have made some progress; the third has made a slow start; the fourth and fifth have finished their task: some more space and indeed more funds were promised for the Slade, and Library finance is now to be allocated according to a new formula—though with what advantage to the Library remains to be seen. We are now bound to take account of the needs of departments which have a buoyant student demand and ensure that there are sufficient staff to teach those students by filling posts as they fall vacant, while imposing cuts on those areas in the College which no longer attract students in numbers commensurate with their staff. Almost inevitably we are going to have to reduce our resources for research. But, having imposed a freeze, the first thing we want to do is to thaw as far as we possibly can. The College must not become frost-bound.

In cutting staff costs the Secretariat, as might be expected, is giving exactly the lead one knows they would give: they are devising savings in staff which will practically enable them to meet their quota of 5 per cent. But it is no good the College expecting that they will give the same service as before. If you operate on only one central duplicator instead of two, departments and committees must expect delays. All sorts of services will suffer; and we will have to learn to communicate more by internal telephone, by staff meetings and by word of mouth than by the type-written word. Back to the quill pen—or, at any rate, to the ball-point.

Student Numbers

The UGC has already asked us to reduce our projected rate of increase in student intake, but we are still being asked to make some increase. Our former target was 5,700 full-time equivalent students by the end of the quinquennium. Now we are asked to take 5,400, an increase of 300 over the figure we reached in 1973–74. For 1974–75, compared with the previous year, the number of students admitted to undergraduate courses in the College rose by just over 2 per cent to 1,298, despite a fall of about 3 per cent to 11,000 in the number of applications for entry to these courses. Over the past ten years our total student numbers have risen, on an average, by 80 to 100 a year, and we are hopeful that, with the introduction of new courses and the support we are giving to those departments that are able to attract students, we shall achieve our target—but to do this we must also maintain our postgraduate numbers.

Economies

We must reduce establishments. The staff-student ratio will worsen even if we take no more students, and research will be curtailed. But we can alleviate these difficulties if only we will economise. Last winter we made some startling economies in the month of January during the three-day week. Goethe's dying words were 'More light'; but we discovered that the symbolic meaning of this exhortation, namely that the College should maintain its position as a centre of enlightenment, was certainly compatible with a great deal less light and less heat during the winter months. We are going to have to return to the spartan days of scholarship when like Browning's grammarian we will be huddled in greatcoats and swaddled in gowns, and will settle *hoti's* business dead from the waist down. But our advisers have already discovered a way of cutting our fuel bill, and for a capital expenditure of £63,000 we expect to make savings of £14,500 a year.

We must not delude ourselves how much we shall achieve. Cheeseparing economies, such as we first practised in 1968, save little. But a drive on the consumption of heat, light and energy could save us a great deal; and some of the most ingenious spirits in the College will undoubtedly convene to discover what means could be used to cut recurrent Collegiate and departmental expenses.

The Building Programme

The great building plan for the College was intended to sweep away the temporary huts and rejuvenate the southern part of the rectangle, as part of a master plan for decanting, demolition and rebuilding, leading eventually to the provision of accommodation for the preclinical departments of the Royal Free Hospital School of Medicine, which will be joining our own preclinical departments as part of the Todd reorganisation of London medical schools. To-day that plan has receded into outer space. It is no more than a gleam in the eye of the UGC. The UGC has already suggested to the Vice-Chancellors that building funds are so scant that universities might prefer to have what little there is in the form of a minor works programme. We have no idea when the University will get an allocation for the Bedford Way wing which in the plan is intended to enable us to decant some of the staff from buildings which are to be demolished and replaced by modern blocks. It may be that we shall have to discover some less expensive alternative if we are to bring the great scheme back from outer space.

Nevertheless, let us once again count our blessings. We received a

grant for the adaptation of the two houses in Taviton Street which the University had given us to enable us to receive staff and activities from the Institute of Computer Science, and for the adaptation of the Bartlett Building, which will be emptied when the Architecture school moves in January 1975 into Wates House. So we have done less badly than we might have done. What is more, the new changing rooms at Shenley, whose completion was held up by material and labour shortages, have now been completed. They will be in full use this session. That we have been able to finance this project is due largely to Dr Gordon Hall, whose skilful negotiations with the Arsenal Football Club enable them to use Shenley to their advantage and to our considerable profit.

Let us look at another area in which energy, foresight and ingenuity on the part of the College officers involved, in particular the Secretary, Finance Secretary, Bursar, and the Chairman of the Student Accommodation Committee, have produced remarkable results. In the last Report we had to acknowledge the loss of Bentham Hall, our oldest student residence. The owners, perfectly understandably, told us that they intended to raise the rent from £5,000 to £30,000. It was an old building and uneconomical to run, and we decided to leave. But we lost 170 student rooms. However, using the resources which had been built up from vacation lettings, we were able to convert Maples' old hostel in Grafton Way, and so obtain a further 80 rooms at the beginning of 1973–74. Four houses in Gower Street provided another 70 places. Four houses in Taviton Street added a further 80. We have, in fact, ended up with more rooms than we lost in Bentham Hall. It is true that the future is bleak. It is inconceivable that the College could to-day embark upon the further schemes it has in mind, when the Student Accommodation account may well be in deficit during 1974–75 because of inflation. We must build up more savings, out of vacation earnings, before we can develop the derelict property in Maple Street and exploit our Camden Town site further. But the fact that we have done so much indicates that where there's a will there's a way.

Finally, let us salute the completion of a building which, considering all the difficulties of the three-day week and shortages of labour and material, reflects the greatest credit on all concerned, including the contractors, who are also our benefactors. Despite some delays Wates House, the new building for the School of Environmental Studies in Gordon Street, has kept fairly well to schedule. The whole building should be occupied by Christmas, enabling the present space in the Bartlett Building to be released. The major part of the

cost of this project is being met from a substantial donation from the Wates Foundation, but there is still an estimated shortfall of about £180,000 to be found.

Social Matters

One of the saddest casualties when we are so strapped for funds is the plan we have been nurturing for improving amenities and reducing squalor on the College Rectangle. Two of these abortive schemes deserve a mention.

The first was a scheme to clean the stone of the Front Quadrangle. There was strong support for this on the College Committee and among the Friends of the College, who offered to meet half the cost. But academic life would lose half its savour if such a scheme were to be unopposed. Needless to say, there was a distinguished minority who argued that cleaning would be disastrous and that the chiaroscuro of the weathering was singularly attractive: indeed some went so far as to argue that Wilkins designed his building as he did with the expectation that the stone would get dirty. The aesthetic battle, however, had hardly been joined when the trumpets blew a retreat. The Friends' offer to clean the stone is unlikely to be taken up because the College cannot find the matching finance.

Among the opponents of cleaning the stone were the Students' Union. Perhaps this was less an aesthetic judgment on the scheme than an expression of preference for another scheme for spending College money on our living conditions if any money was going. The Union put its weight behind a scheme to abolish, or at any rate diminish, the number of motor cars in the Front Quadrangle. An ingenious plan devised by Mr Goddard envisaged concentrating the car parking on the south side of the Quadrangle in the shade of the South Wing, grassing down the area in front of the Portico, and leaving the whole of the area in front of the Slade building free of cars. It is true that students who support this scheme are a group within the College who largely do not possess cars; 40 per cent of them live within a quarter of an hour's journey (in many cases on foot) from the College. But a substantial number of staff support the scheme on the grounds that the Front Quadrangle is ruined in appearance by the parked cars and is no longer an oasis for recreation and discourse.

Naturally such views excite opposition, mainly from those who come to College by car. They ask whether the College would be justified, for the sake of general amenity, in depriving a substantial number of colleagues of a privilege which they have enjoyed for

many years and which to some is vital to their living arrangements. Should the majority deprive the minority of their rights? The motor car may be a menace; it is not yet illegal. Indeed they turn with marked irony to the Students' Union and ask why it is that at the student residential complex of Ifor Evans and Max Rayne Halls in Camden Town it has been found necessary to mark out and number at least fifty parking places for students' cars? Do these cars not vitiate amenity as much as those in the Front Quadrangle do?

The Goddard plan is likely to go the way of the Clean Wilkins Scheme. It is not cheap; and though it still finds places for parking 60 per cent of the present number of cars it requires a good deal of paving and grassing down. This summer the College found a compromise. The small space to the north of the Portico steps was closed off by trees in tubs, and chairs and tables were set out so that people could sun themselves when the sun shone—which this summer was not all that often. For an hour or two on most days some hardy souls have been visible, doggedly enjoying the open air. Most people liked the innovation and it may be repeated and extended next summer.

The root and branch solution favoured by some in the Union is impractical. It is impossible to close the Front Quadrangle completely to vehicles. Too many deliveries have to be made, visitors arrive, and special cases exist among staff—the disabled, and those who work late at night—for a no-parking rule to operate. But car users are under pressure from all sides. Camden as a local authority used once to insist upon the College providing parking facilities: now they are asking us to reduce the number of parked cars. There was a time when academic staff willingly accepted that every inch of space should be covered with 'temporary' huts to house some new research project or social activities expelled from the main building by expansion of student numbers. Now there is a demand that the huts should be levelled to the ground and the cars which stand parked around them expelled. It is all the more lamentable that at just this moment when a welcome change of taste is occurring, the UGC's capital programme has been virtually abolished.

To Sum Up

In the fairy tale of our national life the universities do not yet resemble Baron Stoneybroke's house in *Cinderella* where the brokers' men are due to appear any minute. Government will not allow the universities to go bankrupt and such alarmist speculation is naive. But Government will almost certainly use uncertainty and deficit

financing as the thumb-screws to extort savings from the universities.

The worst way to find these savings is to react mechanically. If everything in University College were to be cut by 5 per cent in two years without scrutiny it would be as if—to change the metaphor from pantomime to ballet—the wicked fairy Carabosse in *Sleeping Beauty* had woven her spell: we should fall into the profound slumber of stagnation for a generation. Small departments can make no significant savings; nor can those large departments which are still inundated with student applications and are operating with a staff-student-load ratio of over 1:12. We have therefore got to scrutinise every post and every option. During the past ten years options have proliferated. New options are often needed to attract more students or to open up new fields of learning; in the past they have been offered in addition to existing courses. Now there is going to have to be a choice between the old and the new. Now if undergraduate teaching in some areas is in short supply we shall have to question whether a M.Sc. course, however closely attuned to national needs, is to continue if it cannot attract more than a handful of students each year. We have a number of great research departments, in the humanities as well as in the sciences, which, either in themselves or in the units they contain, have an immense influence on postgraduate and post-doctoral studies, but teach few, if any, undergraduate students; if we are to keep them, we shall have to prune elsewhere.

This moral is also as clear for the University of London as the writing on the wall at Belshazzar's Feast. Sapient committees producing weighty memoranda gravely presented to the highest bodies in the Senate House have proclaimed the need for rationalisation. A few years ago two subjects were investigated—and reports were produced: one advocated the need for a considerable increase in expenditure, the other blandly issued an apologetic *non possumus*. The trouble with so many schemes of this kind is that they produce no immediate savings in posts and, by the transfer of staff from one institution to another, make demands for space which cannot be met, because no such space exists. But a start has been made. The Institute of Computer Science has been split up and allocated to four Schools, University College receiving one part and a valuable addition to our own department. A lot could be done during the next ten years to use resources more economically but we shall have to think along different lines from those which guided our thinking in the last ten years.

Exhortation cannot be all one-sided. It is not only posts which are frozen. Despite the high morale of my academic colleagues in these

vicissitudes our smiles of reassurance become frozen too. In education Government runs up the flag every so often for nursery, primary, secondary, adult, or higher education. The flag for higher education flew boldly for the quinquennia between 1952 and 1967. It is lowered to-day—indeed for all the other sectors of education the flag is barely at half-mast. The quality and quantity of research done by the universities are now both at risk: and the increased teaching load inherent in the deliberate worsening of the staff-student ratio will inevitably result in students getting less formal teaching, and probably less good formal teaching, than hitherto, as well as less of the informal contact with teachers which they rightly want. In the end, education depends on the interaction of teacher and pupil—'a simple bench, Mark Hopkins on one end and I on the other', as James Garfield, later President of the United States, described his experience at Williams College under a great teacher. When all the terms of art and jargon which are used to-day about staff-student ratio have been enunciated and batted about by university committees, Garfield's wise statement should be in our minds. That is what education is about.

There is another institution which has problems in the future to solve—the UGC. The quinquennial system of financing universities is in ruins. What should be put in its place? Universities have the impression that there is new thinking in Park Crescent. They are naturally not a party to such thoughts because the UGC is the confidential adviser to the Government. But it will be no good if the UGC brings out the old watchwords about the need for forward planning and the independence of universities. If university expansion is at an end and massive inflation is here to stay, a rolling triennial grant may be more useful to universities than a quinquennial grant with dicey supplementation. In wage negotiations the universities have less and less freedom. They are dictated to by the Department of Employment—and at times sold down the river by them. What is the use of the UGC talking about freedom to use the block grant as universities see fit, if the block grant is made nonsensical by inflation for which universities are not compensated? What is the use of saying that refectories and halls of residence accounts must balance if the UGC washes its hands of any responsibility for the negotiations with Government about the level of the student grant? It is not only the universities who need to re-think their future. The UGC need to re-think their terms of reference and criteria and to make a fresh attempt to convince Government and the public that the interests of the universities and the nation's interests coincide.

For let there be no mistake about the matter. Vast sums are required for the universities, not merely to compensate in part for a lost year's supplementation, but to meet in the forthcoming year the cost of inflation which some good judges think will be higher than 20 per cent in the university sector. The supplementary grants should not be paid a year in arrears: they are now required every six months. The things which make universities what they are as places of learning and research—books, periodicals, postgraduates, assistants, scientific supplies and equipment—are now in question.

Yet, having said this, we know that the economy of the country is on a knife-edge. At the time that I write, the only certainty is that public expenditure in both higher education and the arts will be cut—and that means that commitments dear to our hearts will not be honoured. By how much they will be cut we do not know. I end with the question which I put at the beginning. Can we maintain University College as a centre of excellence without being compelled to make people redundant?

December 1974 ANNAN, *Provost*

Building Programme

The Provost in his 'Foreword' has referred to our building projects (p. 11), and to the effect of the current financial situation on them. In particular, allusion has been made to the College's redevelopment programme, which has involved a tremendous effort in planning, and which would eventually see the amalgamation of the pre-clinical departments of the Royal Free Hospital School of Medicine with those of University College as part of the Todd scheme. It is clear that the full accomplishment of the scheme would bring great benefits to the College as a whole, as well as producing a Medical Faculty of enormous range and potential. Long delay would be disappointing for the College, and particularly so for the RFHSM, who have seen their hopes of a new pre-clinical school receding and receding. We must hope that in one way or another something can be accomplished.

Finance

The income of the College for 1973–74 amounted to £10,870,646, an increase of £922,437 over 1972–73. Expenditure in 1973–74 was £10,660,166, inclusive of the cost of research borne by outside grants, which total £1,689,321 compared with £1,618,496 in 1972–73. The number of these grants was 500.

Capital grants announced for the year amounted to £72,673, compared with £139,894 for the previous year. Receipts against these and previous capital grants and capital expenditure amounted to £90,236 compared with £153,358 in 1972–73.

While the out-turn for 1973–74 shows a surplus of £209,151 this cannot be taken as a sign of a healthy financial state. This sum, which includes the balance brought forward from earlier recurrent grants, will disappear during 1974–75 and, as the Provost has indicated in his 'Foreword', we are likely to end the year with a serious deficit. In the accounts for 1973–74 some provision has been made to meet the anticipated cost of increased London Weighting for technical secretarial and clerical staff from 1 April 1974, but the full impact of this extra cost will not be felt until 1974–75. Similarly, the increased cost of payments under threshold arrangements relates only to the period from May to July 1974. As threshold arrangements continued up to November 1974, the cost of the payments will be considerably higher in 1974–75; but the accounts will not reflect the full annual cost until 1975–76.

The Committee set up to investigate ways of achieving fuel economies, following the quadrupling of oil prices and the announcement of reductions in university grants during 1973–74, has already produced significant proposals, but it will obviously be impossible for the College to keep expenditure upon fuels within previous financial limits.

Apart from these general problems, we, in common with all universities, are faced with difficulties of maintaining balanced budgets on what are, in fact, trading undertakings—Student Accommodation and Refectories. In our halls of residence we have been very successful so far with our vacation lettings, and this has enabled us not only to subsidise the fees charged to students but also to build up a substantial fund which has helped to provide further student residences. With mounting costs, however, the position has changed, and in 1974–75 we are unlikely to do more than break even. With the Refectory, over the last two years, the College deliberately kept price rises much below the level necessary to balance the budget, in recognition of the inadequacy of the students' maintenance grants during that period. This resulted in Refectory losses amounting to £22,000, and it was clear that we could not continue in this way. Significant price rises are essential in 1974–75 and, while these may be accompanied by savings (which must inevitably reduce the general amenity), we shall still be faced with an extremely difficult task in endeavouring to balance the budget.

Administration

A significant move this year was the admission of students elected by the Union to membership of the Professorial Board and its Executive Committee. This should improve communication and enable student members to make a contribution beyond what they already make at Faculty and Departmental level through existing representational machinery.

Despite inevitable delays in the implementation of the scheme, envisaged in the Todd Report, for the amalgamation of the Royal Free Hospital School of Medicine, University College Hospital Medical School and the College, a further step in central management liaison was taken at the beginning of the session, by the introduction of arrangements for the attendance of observers from each institution at meetings of certain governing and management committees of the other two. These arrangements have proved invaluable in facilitating exchanges of views and information and providing experience of the working of each other's committee systems.

Student Numbers

The total number of registered students reached the record figure of 5,622, an increase of 167 over the previous session. The greatest increase was in the population of full-time undergraduates, whose numbers rose by 119 to 3,463. The number of students admitted to first degree and first diploma courses in October 1973 was 1,271, an increase was in the population of full-time undergraduates, whose trend of steadily increasing numbers which was interrupted last session. The numbers of students being admitted to undergraduate courses have increased in almost equal proportions in all Faculties, which contrasts with the national trend in applications as reported by UCCA.

The student load, which is calculated in terms of full-time equivalent units for the UGC, rose to 5,049, which excludes a further load of 71 units not taken into consideration for UGC purposes. The increase in total student load was 264 units, even greater than the increase in student numbers, which reflects both the large share of intercollegiate teaching borne by the academic staff of the College and also the increasing proportion of postgraduate students attending Master's Degree and Higher Diploma courses.

Of the full-time undergraduates in attendance for the whole session, 41 per cent were living in halls of residence or other accommodation provided by the College or the University, 25 per cent lived in their own homes and the remaining 34 per cent were in lodgings found privately or through the University Accommodation Office.

Careers Service

With the retirement of Dr R. C. Brown at the end of last session, the post of Careers Adviser was discontinued, and arrangements were made for the University of London Careers Advisory Service to take over the direction of the College Careers Office. Under these arrangements, students are able to consult officers from the University Service, who attend regularly at the College, and also to make use of the wide ranging facilities offered by the Service. It is gratifying to note that of the 887 students who took their first degree in 1973 only 2 per cent were recorded as unemployed at the end of that year. The unemployment rate for postgraduates was only 0.9 per cent.

Academic Matters

Several new courses were introduced in 1973–74. Students were admitted for the first time to the B.A. in Ancient History and Social Anthropology, the B.A. in Anglo-Saxon and early medieval Euro-

pean Archaeology, the B.Sc. in Statistics and Computer Science, and the B.Sc.(Eng.) in Biochemical Engineering. New final year fields of study were introduced within the B.Sc. course unit scheme which are of particular interest to medical students who intercalate a year of studies to obtain the B.Sc. Degree before beginning clinical studies; the new fields are Immunology (taught mainly by the Department of Zoology and Comparative Anatomy) and Human Biology (taught mainly by the Department of Anthropology). At the end of the session the first students completed Part II of the Examination in Basic Medical Sciences and Pharmacology, thus completing the pre-clinical course for the M.B., B.S. Degree, which has now replaced the 2nd M.B. pre-clinical course and examination. At postgraduate level, students were admitted for the first time to M.A. courses in Linguistics, Phonetics and the History of European Art and to the College Diploma course in Design and Planning Education. Teaching began for the University Diploma in Material Culture within the Department of Anthropology.

During the session we took advantage of the flexibility of the London B.Sc. Degree, and of the opportunities available within it for inter-departmental co-operation, to prepare two new degree courses in science. The first is one in Medicinal Chemistry, a collaboration between Chemistry and Pharmacology with an 'applicable' flavour, which seems to be attracting interest. The second is a course (long contemplated) in Human Sciences, involving elaborate co-operation between six or seven departments with biological interests and a good deal of both breadth and depth. Furthermore, the amalgamation of the Departments of Physics and Astronomy is facilitating the mounting of courses whose components are drawn from these two areas, and which reflect the interest in space generated by recent extra-terrestrial achievements.

Apart from this, our intention has been to put what little new resources we can spare into the building up of those departments which can attract, and are willing to accept, additional students: Psychology, Geography, Anthropology, English, History of Art, Philosophy, mainly. We hope that this intention can be realised.

As in past years, the facilities offered by the Computer Centre have been heavily used by the College and several other Schools of the University. The Computer Board for Universities and Research Councils has recently approved the installation of some high density tape drives and further disk storage, for installation in mid-1974. The Board of Management of the Centre has been much concerned with the problem of eventual replacement of the IBM 360/65, which

is now eight years old, and proposals have been made to the University. A 'User 200' link to the University's main centre at Guilford Street has been installed and a GE 2050 link to the IBM 360/195 at the Rutherford High Energy Laboratory has been provided by the Science Research Council. These links give access to machines that are much more powerful than that available in the College and so extend very considerably the facilities available to members of the College. Copies of the videotapes of our Fortran course have been sold to various installations and have also been transferred to cassettes for individual viewing.

The scope of the work tackled by the Audio-Visual Unit continues to expand. Both equipment and staff have been increased in response to demand and the Unit's services have been used by more than twenty departments during the year, as well as by a number of outside bodies using College premises. Very complex audio-visual facilities have been provided at conferences and meetings, one conference requiring a team of twelve persons to operate the equipment. A wide range of projection, audio and video equipment is now available for loan either to departments or to individual members of staff or students. The Slade School in particular has made extensive use of such loans to provide students with the means to explore the artistic potentialities of television. The Unit's modest television studio has been improved and an expansion of television programme production is planned.

In 1973 arrangements were made for the University of London Institute of Computer Science to be disbanded at the end of the session 1972–73, and for its resources to be redeployed between Imperial College, Queen Mary College, University College and Westfield College. Under these arrangements seventeen members of the academic staff, including two professors, as well as supporting technical and secretarial staff, were transferred to the College and attached to the Department of Statistics and Computer Science. Support funds were apportioned between the host Colleges and equipment was distributed as appropriate. As University College was unable to provide accommodation on its limited site for the large number of staff it was taking over from the Institute, the Court of the University generously made available to the College two houses in Taviton Street. It is the intention of the College that these houses shall be used in such a way that space adjacent to the Department of Statistics and Computer Science can be released to accommodate the staff from the Institute, and thus facilitate the integration of the Department. In the meantime the staff continue to work in the premises of the former Institute in Gordon Square.

The names of three College Departments were changed during the session, in order to indicate more clearly the nature or the range of their interests: the Departments of Archaeology, French, and Spanish became respectively the Department of Classical Archaeology, the Department of French Language and Literature, and the Department of Spanish and Latin American Studies.

A list of publications of members of the College departments will be found on pages 42–108. This is an impressive record and though no attempt is made here to summarise the research projects on which the departments have been engaged during the session, many of them have attracted substantial grants from Research Councils and other grant-giving bodies, which are gratefully acknowledged in Appendix XIII.

A film, entitled 'University College London', directed by Mirek Dohnal, formerly of the Slade Film Unit, and produced by James Leahy, Director of Film Studies in the Slade School, was completed during the session. It has been made primarily as an aid to the recruitment of students, and copies are being made available for loan to schools, Local Education Authorities, and other educational bodies.

The eighth annual Schools Conference took place at the College from 27 to 29 March and proved to be once again a most enjoyable and successful occasion. About seventy guests, including Heads of Schools or their deputies and a number of Local Education Authority Careers Officers, as well as many members of the College academic staff, took part in the proceedings. The College greatly values the opportunity given by these conferences of forging personal links between College departments and those responsible for advising prospective students. Certain departments have now begun to run similar conferences of a more specialised character.

The Seventy-eighth Foundation Oration was delivered by Professor Ralf Dahrendorf in the Collegiate Theatre on 14 March 1974. The title of his oration was 'Observations on Sociology and Society'.

College Day Nursery

The College Day Nursery, which had been several years in the planning stage, was opened in January 1974. It is situated in the basement of 20 Taviton Street, conveniently near to the College Rectangle, and has been registered with the Local Authority to care at any one time for a maximum of sixteen children up to the age of three years. Miss Rosemary Carpenter was appointed as the Nursery's

first Matron, and she is assisted by two qualified nursery nurses. In its first year of operation the Nursery has been fully used.

Association of Friends of University College London

During 1973–74 the Friends of University College authorised grants totalling £3,178 in support of the following projects: new exhibition frames in the Cloisters for the College Collection of Prints (£1,500); a new Sony Videorover portable camera/VTR system, with accessories and fitted carrying case, for the Audio-Visual Aids Centre, with arrangements for use by the Union's T.V. Society (about £1,000); a secondhand sculling boat for the University College and Hospital Boat Club (£200); the maintenance of the Film Society's film record of College affairs for the College film archive (£150); twelve stainless steel coffee sets for the Refectory, for use at College functions (£128.40); a secondhand piano for Ifor Evans Hall (£100); the purchase and reinstallation of new equipment for the Union Amateur Radio Society (£100).

The Association of Friends has played an important part in providing much needed amenities. It is hoped that by increasing its membership and subscriptions the Association will be able to continue to finance those projects which enhance the corporate life of the College and which cannot be supported by funds from public sources.

SUPPLEMENT

HONOURS AND DISTINCTIONS

In the New Year Honours in 1974 Professor O. R. Marshall, Vice-Chancellor of the University of the West Indies, formerly a student and member of staff in the Faculty of Laws, and Mr Justice D. A. R. Alexander, Chief Justice of the South-Eastern State, Nigeria, also a former Laws student, were created Knights Bachelor. The C.B. was conferred on E. G. Cass, Deputy Under-Secretary of State (Finance) in the Ministry of Defence, a former student in the Faculty of Arts, and the C.B.E. on Professor E. J. Denton, Royal Society Research Professor in the University of Bristol and Fellow of the College.

In the Queen's Birthday Honours Professor A. F. Huxley, Professor of Physiology and Royal Society Research Professor at the College, was created a Knight Bachelor, as were three former students: J. C. Hanbury, Chairman of the Central Health Services Council; Dr W. L. M. Perry, Vice-Chancellor of the Open University; and R. W. Southern, President of St John's College, Oxford, for services to Medieval History. The C.B.E. was conferred on S. L. Wright, lately Medical Officer of Health, Croydon, a former student in the Faculty of Medical Sciences.

In the General Election held in February 1974 several former students were elected or re-elected as Members of Parliament. P. K. Archer (Philosophy) for Warley West (previously Rowley Regis and Tipton), B. T. John (Laws) for Pontypridd, A. W. Lyon (Laws) for York, and I. R. Stanbrook (Economics) for Bromley (Orpington), were re-elected; and seats were won for the first time by B. Davies (History) for Enfield North, A. S. Newens (History) for Harlow, C. B. Phipps (Geology) for Dudley West, and A. D. Steen (Psychology) for Liverpool (Wavertree).

A number of interesting and important appointments were announced during the session. Appointments of members of the College included those of Lord Annan as Chairman, appointed by the Home Secretary, of a Committee of Enquiry into the Future of Broadcasting, Professor E. J. Denton as Director of the Plymouth Laboratory and Secretary of the Marine Biological Association of the United Kingdom, Professor J. R. Hale as Chairman of the Trustees of the National Gallery, Dr L. Rotherham as Chairman of the Defence Scientific Advisory Council, Professor M. J. Seaton as Chairman, appointed by the Council of the Royal Society, of the

National Committee for Astronomy and *ex-officio* a member of the National Committee for the International Council of Scientific Unions, Mr D. J. Foskett as a member, appointed by the Secretary of State for Education and Science, of the Library Advisory Council (England), Professor B. C. Vickery as a member, appointed by the Institute of Physics, of the review panel on information research in Physics, and Dr N. V. Smith as a member, appointed by the Social Science Research Council, of a panel on research in linguistics and the social sciences, to which Professor B. B. Bernstein and Dr D. Crystal, both former students and former members of staff, were also appointed. Sir Arthur Vick, a former member of the staff of the Department of Physics, was appointed Vice-Chairman of the Committee of Vice-Chancellors and Principals, of which Professor O. R. Marshall was appointed Secretary-General. Among appointments of other former members of the College were those of D. T. Richnell as Director-General of the British Library Reference Division and a full-time member of the British Library Board, R. J. Roberts as Sub-Librarian and Keeper of Printed Books in the Bodleian Library, Oxford, and Professor J. E. Salmon as Registrar of the Council for National Academic Awards. Professor J. P. Quilliam was elected Chairman of the Convocation of the University of London.

Professor Sir Bernard Katz and Professor Sir Harrie Massey were both re-appointed Vice-Presidents of the Royal Society; Emeritus Professor H. E. M. Barlow, Fellow of the College, was elected an honorary member of the Japanese Society of Electronics and Communications Engineers, the first Briton to be so honoured and now the only living honorary member in Europe; Emeritus Professor Lord Evans, Fellow of the College, was elected a Vice-President of the Royal Society of Literature, and Mr D. J. Foskett an Honorary Fellow of the Library Association; Sir Peter Medawar, Honorary Fellow of the College, and Sir Frank Young, Fellow of the College, were both elected Honorary Fellows of the Royal College of Physicians; Professor E. G. Turner was elected President of the Union Académique Internationale, Sir Frederick Warner, Fellow of the College, was elected Chairman of the British Standards Institution, and Professor Elizabeth M. Wilkinson was elected President of the English Goethe Society. Of former members of the College Major-General Sir Leonard Atkinson was elected Chairman of the Council of Engineering Institutions, J. A. Eden an Honorary Member of the Photogrammetric Society (Great Britain), and M. J. Milner, Chairman of the British Chemical Engineering Contractors Association.

Professor Stephen Spender was elected to an Honorary Fellowship of University College, Oxford, and Dr D. Wilkie was appointed an Honorary Professor of Biology at the Graduate School, City University of New York.

The following were honoured by election to foreign academies and societies: Professor P. G. Foote was elected a member of Vetenskaps-Societeten, Lund, Sweden, Dr J. Lewins a Fellow of the American Nuclear Society, J. W. Scott a Corresponding Member of the Royal Gustav Adolf Academy of Sweden, and Professor J. Z. Young a Foreign Member of the American Philosophical Society; a former student in the Faculty of Arts, D. W. R. Ridgway, was elected a Foreign Member of the Istituto di Studi Etruschi ed Italici, Florence. T. Stöverud was created a Chevalier First Class of the Order of St Olav (Norway).

Honorary degrees were conferred on members of the College as follows: the D.Sc. of the University of Salford on Sir Charles Goodeve, the LL.D. of the University of London on Lord Goodman, the D.Sc. of the University of London on Professor A. F. Huxley, the D.Lit. of the University of St Andrews on Osbert Lancaster, the D.Phil. of the Hebrew University of Jerusalem and the D.H.L. of Columbia University on Professor A. D. Momigliano, the D.Sc. of the University of Oxford on Professor Sir George Porter, and the D.Sc. of the University of Bath on Professor J. Z. Young. The honorary degree of D.Litt. of the University of Manchester was conferred on Professor Sir Ernst Gombrich, formerly Durning-Lawrence Professor of the History of Art at the College.

Professor E. A. Ash and Dr I. M. Mason, and two of their research students, Dr R. F. Humphreys and Dr R. M. de la Rue, were awarded jointly the Institution Premium of the Institution of Electrical Engineers, Professor R. E. D. Bishop was awarded the Clayton Prize of the Institution of Mechanical Engineers, Dr H. Davson the Medal of the University by the University of Antwerp, Dr A. K. Deb the 1972–73 Nawab Zain Yah Jung Bahadur Memorial Gold Medal of the Institution of Engineers (India), and Professor A. F. Huxley the Copley Medal of the Royal Society. Professor N. A. Mitchison was awarded the Paul-Ehrlich-Ludwig-Darmstaedter Prize of the Paul Ehrlich Foundation at the Johann Wolfgang Goethe University, Frankfurt, and Dr B. P. Roberts the Meldola Medal and Prize of the Royal Institute of Chemistry. Professor P. N. Rowe and Dr D. J. Everett, a former student, were awarded jointly the Moulton Medal of the Institution of Chemical Engineers, Professor F. Sondheimer was awarded the Synthetic Organic

Chemistry Medal of the Chemical Society for 1973, and the 'Medaglia d'oro dei benemeriti della scuola, della cultura e dell'arte della Repubblica Italiano' was conferred on Professor J. A. C. Thomas by the President of the Italian Republic in recognition of his excellence in the field of Roman Law. Professor J. Z. Young was awarded a Gold Medal and Prize as the first holder of the F. O. Schmitt Lectureship in Neuroscience at the Massachusetts Institute of Technology. Dr A. R. H. Baker, formerly both a student and member of staff in the Department of Geography, was awarded the Gill Memorial of the Royal Geographical Society for 1974 for contributions to historical Geography, and Dr T. D. Whittet, a former Physiology student and later Honorary Consultant Pharmacist to the Faculty of Medical Sciences was awarded the Harrison Memorial Medal of the Pharmaceutical Society of Great Britain. Dr M. W. Grist, a former student of the Faculty of Engineering, was awarded the President's Prize of the Photogrammetric Society (Great Britain).

APPOINTMENTS

Mr F. E. P. Sandilands was appointed Treasurer of the College and Chairman of the Finance Committee in succession to Sir John Stevens, and Miss Margaret Marshall, Miss Janet Powney and Mr J. Vickers were appointed members of the College Committee.

At the end of Professor Sir Harrie Massey's four-year term as Vice-Provost the College decided to have two Vice-Provosts, and Professor H. Billett and Professor S. P. Datta were appointed to this office from 1 October 1973.

At the beginning of the session, Dr J. W. Black, formerly Associate Research Director, Smith Kline & French Research Institute, was appointed to the Chair of Pharmacology and the Headship of the Department, and B. C. Vickery, who was Assistant Director of Aslib, came to the Chair of Library Studies and the Directorship of the School of Library, Archive, and Information Studies. Professor D. C. Cooper, formerly Professor of Computer Science and Head of the Computation Services Department, University College of Swansea, was appointed from 1 January 1973 to the Chair of Computer Science, which had been established with financial support from IBM United Kingdom Ltd. The title of Professor of Labour Law was conferred on Dr R. W. Rideout, and the transfer to the College of part of the staff of the University's Institute of Computer Science included two professors by conferment of title: Professor

P. T. Kirstein, Professor of Computer Systems, and Professor K. Wolfenden, Professor of Information Processing.

Dr M. C. W. Evans came from King's College London to the Readership in Plant Chemistry, and Dr H. Judith Milledge was appointed to the Readership in Crystallography, having previously been Reader in Chemistry by conferment of title. The title of Reader was conferred on Dr D. V. Banthorpe (Chemistry), Dr D. R. Harris (Geography), Dr C. J. Holdsworth (Medieval History), Dr Hidéko Ishiguro (Philosophy), Dr P. H. Kemp (Fluid Mechanics), Mrs Winifred M. T. Nowottny (English), and Dr C. Wilkin (Physics).

The following Visiting Professors were appointed during the session: C. M. Correa, Banister Fletcher Lecturer (Environmental Studies); Master I. H. Jacob, Master of the Supreme Court (Laws—English Law); Professor M. McCall, Professor of Greek, Johns Hopkins University (Greek); Professor J. Roorda, University of Waterloo, Canada (Civil and Municipal Engineering); Professor M. von Platen, University of Umeå, Sweden (Scandinavian Studies).

There were a number of changes in College Faculty appointments: Professor D. M. Wilson became Dean, Professor I. R. Christie Vice-Dean, and G. F. Arnold Sub-Dean of the Faculty of Arts; Professor M. A. Millner and Professor D. C. Holland were appointed respectively Dean and Vice-Dean of the Faculty of Laws; Professor G. C. Drew and Professor D. J. Millen respectively Dean and Vice-Dean of the Faculty of Science; Professor K. O. Kemp and Professor A. L. Cullen respectively Dean and Vice-Dean of the Faculty of Engineering; Professor D. W. James became Dean of the Faculty of Medical Sciences; and Professor D. A. Turin was appointed Vice-Dean and B. B. Nutt Sub-Dean of the Faculty of Environmental Studies.

During the year announcement was made of the following appointments of members of the academic staff to academic posts outside the College: Dr E. D. Brown to a Chair of Law at the University of Wales Institute of Science and Technology, J. Chalker to the Chair of English at Westfield College, Professor D. C. Holland as Professor of Law and Mrs Winifred H. Holland as Associate Professor of Law in the University of Western Ontario, Dr J. H. Johnson to the Chair of Geography in the University of Lancaster, Dr E. J. Jory as Associate Professor of Classics in the University of Western Australia, Professor J. Lynch as Director of the Institute of Latin American Studies, Dr. P. A. Matthews to a Chair of Electronics in the University of Leeds, and Dr J. J. T. Owen to the Chair of Anatomy in the University of Newcastle upon Tyne. The

University of London conferred the title of Professor of Genetics on Dr R. J. Berry in respect of his post at the Royal Free Hospital School of Medicine, and the title of Reader in Zoology was conferred on Dr K. Vickerman by the University of Glasgow.

Appointments of the following former members of the academic staff and former students to academic posts outside the College were also announced: Professor G. D. Sims as Vice-Chancellor of the University of Sheffield, Dr D. S. L. Cardwell to a Chair of History of Science and Technology at the University of Manchester Institute of Science and Technology, C. W. Dearden to the Chair of Classics in the University of Wellington, New Zealand, B. M. Feilden to the Hoffman Wood Chair of Architecture in the University of Leeds, Professor M. A. K. Halliday as Professor of Linguistics in the University of Essex, Dr A. G. Hawkes to a Chair of Statistics at the University College of Swansea, Dr M. I. Podro as Professor of Art in the University of Essex, Professor H. P. Rang to the Chair of Pharmacology at St George's Hospital Medical School, G. E. Sachs as External Professor in the Department of Chemical Engineering in the University of Leeds, Dr P. H. Venables as Professor and Head of the Department of Pyschology, University of York, Dr M. P. Vessey as Professor of Social and Community Medicine in the University of Oxford, and Dr J. A. Willis to a personal chair in Classics and Ancient History in the University of Western Australia. The University of London conferred the title of Professor of Neurophysiology on Dr T. A. Sears, Institute of Neurology, and the title of Reader on Dr G. T. Franglen (Protein Biochemistry), St George's Hospital Medical School, and on H. Hanak (International Relations with special reference to Russian Foreign Policy), School of Slavonic and East European Studies; and the University of Newcastle upon Tyne conferred the title of Reader on Dr R. Roscoe (Physical Rheology).

RETIREMENTS

Professor Marian E. A. Bowley was appointed to the staff of the Department of Political Economy in the College in 1946, after having held various academic appointments before the war and after wartime service in Whitehall. In 1950 she was made a Reader and in 1965 she became Professor of Political Economy; the University has recently conferred on her the title of Emeritus Professor. Throughout her academic life she has been actively engaged in research in the history of economic thought (her 1937 book on Nassau Senior is a classic), and a book on problems in the history of

economic thought was published in her last year on the staff of the College. Her other special field has been housing (including the economics of the building industry) and urban and regional economics. Her 1945 book, *Housing and the State*, still remains one of the most valuable contributions to housing policy ever written. She was also largely instrumental in the introduction of a joint graduate course in the College (together with the School of Environmental Studies) on urban and regional economics. With characteristically indefatigable energy she recently embarked upon a very fruitful research project in the area of regional economics, which she will continue, in the capacity of Honorary Research Fellow in the department, after her retirement. In addition to pursuing productive and distinguished research in two completely different fields that has been embodied in a large number of important publications, Professor Bowley's experience and shrewd judgement has been of great value in administration at all levels. She was acting joint head of the Department of Political Economy for two years; she has recently completed two years as Dean of the University Faculty of Economics, and her College activities have recently included the very demanding post of Chairman of the Refectory Committee.

Professor Frieda Goldman-Eisler was educated in the University of Vienna, where she obtained the degree of Dr.Phil. in 1937. After a period of postgraduate work in psychology at University College, she spent the war years as a Research Assistant in the Listener Research Department of the B.B.C. In 1956 she came to the Department of Phonetics from the Institute of Psychiatry, where she was a member of the Medical Research Council staff in the Social Psychiatry Research Unit, and was responsible for establishing at the College the Psycholinguistics Research Unit, the first of its kind in this country. She very rapidly earned an international reputation for her research on speech and on the relations between thought and language. One of the consequences of this was that the Psycholinguistics Research Unit was able to attract very substantial grants from the National Institutes of Health (U.S.A.) and later from the S.S.R.C. The importance of her research on speech behaviour was recognised by the conferment upon her in 1965 of the title of Reader in Psycholinguistics, and she thus became very appropriately the first scholar to hold a title in the specialised field which she had done so much to develop. She was made Professor of Psycholinguistics in 1970, and the University has recently conferred on her the title of Emeritus Professor. Throughout her career, Professor Eisler's own research constituted pioneer work and her great distinction as a

scholar led to her being invited to contribute to discussions and symposia in many parts of the world.

Professor Hans Grüneberg obtained his Ph.D. in Berlin in 1929 and his M.D. in Bonn in 1932. He came to this country in 1933 as a refugee from the Nazis, and was immediately offered a place to undertake research with Professor J. B. S. Haldane in the Department of Zoology and Comparative Anatomy at University College. He has been a member of the College ever since, except for an interruption from 1942 to 1946 when he served as a Captain in the R.A.M.C. From 1936 to 1946 he held an Honorary Research Assistantship, successively in the Departments of Zoology, of Biometry, and of Eugenics, Biometry and Genetics, and from 1938 to 1942 he was Moseley Research Student of the Royal Society. He was appointed to a Readership in Genetics in 1946, and the title of Professor of Genetics was conferred on him in 1956. In 1965 he became Head of the newly-established Department of Animal Genetics. From 1955 to 1972 he was Honorary Director of the M.R.C. Experimental Genetics Research Unit. Professor Grüneberg has a distinguished record in genetic research and has for very many years been recognised internationally as a leading authority on the genetics and embryology of the mouse. He has published several books, including his now classical monograph *The Genetics of the Mouse* (1st edition 1943), and also numerous research papers. He was elected to the Fellowship of the Royal Society in 1956. The University has conferred on him the title of Emeritus Professor, and he will be continuing his association with the College as an Honorary Research Fellow in the Department of Human Genetics and Biometry.

Professor Siegfried Stein, a graduate of Berlin and Heidelberg Universities, as well as of the Hochschule für die Wissenschaft des Judentum, was one of many young Jewish refugees who came to England in the 1930s. He joined the Department of Hebrew at University College in 1936 in the part-time post of Goldsmid Lecturer in Hebrew and Lecturer in North Semitic Epigraphy, and became a full-time Lecturer in 1945, Reader in 1955, and Professor of Hebrew in 1963. The University has recently conferred on him the title of Emeritus Professor. When he began teaching in the College there were only four students in the Department; to-day the Department of Hebrew and Jewish Studies has nearly forty students, a staff of six, and a growing reputation, which extends far beyond England. During his period of service with the College Professor Stein has encouraged the evolution of a wide range of degree courses and he

readily welcomed the introduction of the study of Jewish History when the Memorial Foundation for Jewish Culture offered financial aid. The growth of the Department under his Headship is one of his major achievements. An accomplished scholar in Bible and classical philological studies, and a noted Germanist, Professor Stein has published a number of important papers, including various learned studies of the intellectual and social activities of British Jews. Among these studies is a fundamental outline of *The Beginnings of Hebrew Studies at University College*. On his retirement he and his family have decided to settle in Jerusalem, and there he hopes to finish his *Interest taken by Jews from Gentiles*, a book on which he has been working for a number of years. All his colleagues, who hold him in the highest esteem, wish him many years of successful work in his new environment.

With the retirement of Professor J. Z. Young from the Chair of Anatomy, the College loses one of its most distinguished Heads of Department. There is space here to record but few of his achievements. He took First Class Honours in the Final Honours School of Natural Sciences at Oxford in 1928, and became University Demonstrator in Zoology in 1934. In 1945 he was elected F.R.S., and in the same year he came to University College as Professor of Anatomy (in the face of what has been termed 'deep visceral rumbling' from the Anatomy establishment, since J. Z. lacked a medical qualification). He achieved a prodigious output of research papers concerning the structure and function of the nervous system, recognised in particular by the award in 1967 of the Royal Medal of the Royal Society, upon whose Council he has served, and in 1973 of the Gold Medal of the Linnean Society and the first F. O. Schmitt Medal of the Massachusetts Institute of Technology. In addition, honorary doctorates have been conferred on him by the Universities of Bristol, Durham, Bath, and McGill. His books include *The Life of Vertebrates*, *The Life of Mammals*, the monumental *The Anatomy of the Nervous System of Octopus Vulgaris*, and *An Introduction to the Study of Man*. The last gives some indication of the breadth of his learning in biology, and shows the pains he took in teaching medical students, for it was upon a series of lectures to them that the book was based. An outstanding teacher himself, he was responsible for major improvements in the preclinical courses, and was a prime mover in establishing the B.Sc. courses in Anatomy in the University. He greatly expanded his Department, and led it to a pre-eminent position in his subject. With all this, he was a philosopher of science too. His book *Doubt and Certainty in Science* derived from the Reith

Lectures he gave in 1950, and he was elected a foreign member of the American Philosophical Society. J. Z. was above all a College man. He played a full part in College administration, serving for two periods as Dean of the Faculty of Medical Sciences, and his counsel was greatly valued in committee. The University has conferred on him the title of Emeritus Professor, and it is hoped that many active and fruitful years of research lie before him.

Miss E. Marguerite Chapallaz retired after thirty years' full-time service in the Department of Phonetics, as well as a period of part-time teaching in the Department between 1932 and 1935. A bilingual speaker of French and English, she was particularly concerned with the teaching of the phonetics of French to students of this and other Colleges. Her main research interest lay however in the phonetics of Italian, and she was regarded as a leading authority in the area of Italian intonation. Her practical command of Romance languages was unique and enabled her, towards the end of her career, to teach the phonetics of French, Italian and Spanish to students of these languages. Her insistence on a high standard of performance and her patience and sympathy for students brought her positive and much appreciated success in all her teaching.

Miss Mary Piggott, Senior Lecturer in the School of Library, Archive and Information Studies, retired at the end of the session. She took a degree in French in the College in 1935, gained a diploma in the School in 1937, Fellowship of the Library Association in 1939, and was a practising librarian in County libraries until 1947 when she was appointed Lecturer in the School. She taught cataloguing principles and practice to diploma and higher degree students, and enhanced the School's reputation considerably in this and related fields. She gained international recognition for her work in the conferences, committees and standardising bodies which during the last twenty-five years have planned effective recording and control of library materials and research information.

Charles Marmoy, the Assistant Librarian in charge of the Thane Library of Medical Sciences, retired on 31 March 1974. He joined the College as a Junior Library Assistant in 1925 and, apart from a period of just over two years between late 1930 and early 1933, he served continuously with the Library for forty-nine years. He was on active war service from 1940 to 1946. He published a number of papers in the field of medical history, particularly in 1958 the definitive paper on 'The Auto-Icon of Jeremy Bentham'. A Fellow of the Huguenot Society since 1948, he played a large part as the Society's Honorary Librarian in steering the Library of the Society into the College

Library, including the Royal Bounty papers and the Wagner genealogical collection. He looks forward in his retirement to adding to the papers he has already had published by the Huguenot Society, and as their Honorary Librarian he will still maintain close links with the College.

On the administrative staff, H. J. Drew, Assistant Maintenance Officer, retired after thirty-four years with the College. He served in the Works Department, from 1930 to 1938, returned in 1948 as College Foreman, and was appointed Assistant Maintenance Officer in 1957.

RESIGNATIONS

Professor D. C. Holland and his wife, Mrs Winifred Holland, resigned from the staff of the Department of Laws, in order to take up appointments at the University of Western Ontario. Professor Holland had a long and happy association with the Faculty of Laws, having joined it as an Assistant Lecturer in 1948 and becoming successively Lecturer, Reader in English Law, and finally Professor of English Law in 1966. He joined the Faculty when it was still in its early stages of post-war development, and played a key rôle in the rebuilding of the Faculty into what eventually has become one of the largest and most flourishing university law schools in the country. One of his outstanding contributions was the rapport that he established with the students of the Faculty, and his talents in this respect were fully deployed during his long period of office as Sub-Dean and Tutor to the Faculty. Indeed the College was subsequently able to avail itself of these talents when he was persuaded to assume the office of Dean of Students, which he held from 1968 to 1972. He was also Warden of Ifor Evans Hall from 1968 to 1973 and of Max Rayne House from 1970 to 1973. Professor Holland was constantly engaged in a multiplicity of administrative tasks, and it was on this account that he was unable to contribute as much as he would have wished to the literature of the law. Nonetheless he established a considerable reputation as a constitutional and administrative lawyer as well as in the field of property law, and his articles on those and other subjects are much appreciated. Professor Holland was also a most successful teacher, as was his wife, who was appointed an Assistant Lecturer in 1966 and became a Lecturer in 1969. Between them they formed a notable team, and they will be sorely missed not only by the Faculty but throughout the College.

Professor J. F. Kermode resigned at the end of the session to succeed Professor L. C. Knights in the King Edward VII Chair of

English Literature at Cambridge. During the relatively short period in which he held the Lord Northcliffe Professorship here (1967–74), he had a disproportionately large impact on the conduct of English studies. In close dialogue with departmental colleagues and students, he led the way to a College-based degree in English involving radical shifts of emphasis both in subjects taught and in methods of teaching and examining. The new pattern was presented in an article written in collaboration with his co-head of department, Professor Quirk, with a title, 'The Muse in Change', which fittingly reminded *Times Literary Supplement* readers of long-standing dissatisfaction with the traditional English syllabus. At the same time, Professor Kermode gave extraordinary testimony of his energy and originality in public service (especially on the Arts Council), in broadcasting, in writing, and in launching the influential *Modern Masters* series. He became chairman of the Poetry Book Society in 1968 and was elected a Fellow of the British Academy in 1973.

With Professor John Lynch's appointment as Director of the Institute of Latin American Studies, the College loses (though the University happily retains) the services of a distinguished scholar, whose association with the Department of History began over twenty years ago. It was as a postgraduate student that John Lynch first came here, and as Leverhulme Lecturer in Hispanic and Latin American History that he returned, after seven years at Liverpool, in 1961. His thirteen years as Lecturer, Reader, and, from 1970, as Professor of Latin American History, were years in which he placed students and colleagues alike in his debt. He made a major contribution to the new degree course in Modern Iberian and Latin American Regional Studies. He was an energetic Secretary of the Board of Studies in History; and among his many services to his Department it is proper to note especially his work as Postgraduate Adviser. None of this, however, interrupted his enviable output of historical work at the highest level, most notably his two-volume history of *Spain under the Habsburgs*. His scholarly and astringent mind will be much missed.

OBITUARY

We record with regret the death during the year of a number of members and former members of the College. They included one Honorary Fellow and six Fellows.

Members of the College who go back to 1968 and beyond will recall T. B. L. Webster in more ways than a short note can mention. He died on 31 May 1974. He was a very bright star of his generation,

and must have shone in any other. In University College, the scene of much of his most fruitful work, he was for twenty years Professor of Greek, and in his time Dean of the Faculty of Arts; he was a keen member of the Chamber Music Club, and of the Common Room ('after all' he said 'one of my predecessors invented it'); he served for many years on the Student Accommodation Committee and in several other capacities both more and less exalted; he was once within inches of being persuaded to lecture to the Engineering Society on British Railway Locomotive Design. If he said he would join in an activity, he did that, and with the same combination of intense intellectual energy and sensitive understanding that illuminated his classical scholarship. It might have been predicted that when he said he would join the College he would take to the place with enthusiasm; it was, perhaps, a fair bet that he would promote the study of Classics here and in the University to a status it had not held before: but whether or not, these things happened. It is not untypical that from a meeting with three young lecturers every Monday at 4.30, which was in effect a remedial class in the reading of academic German, there grew with Tom Webster's leadership first of all a series of hard-working but informal seminars in the Department, and then a pattern for continuing meetings on a larger scale at the Institute of Classical Studies, in whose foundation he played a very great part. In 1969, when he had retired and departed to Stanford, his last academic home, he was elected to the rare distinction of an Honorary Fellowship of the College, to the great satisfaction of former pupils, of colleagues, and of friends in so many of our multifarious Departments, not least those who used to say that you could tell when it was spring in Gower Street by the date the Professor of Greek came to work in sandals.

The death of Dr R. D. McLellan on 3 December 1973 came as a shock to his many friends in the College. After graduating at the College in 1927–28, he joined the staff of the Departments of Latin and Greek and remained there until his retirement as Senior Lecturer in 1968. He became Tutor to Arts Students in 1945 and, additionally, Senior Tutor in 1962, and held both these posts until 1968. He was made a Fellow of the College in 1962. He was a Tutor in the old tradition, and was perhaps fortunate (or far-sighted) in retiring before the Generation Gap began to widen. There was nothing that he would not do to help a student who was in difficulties, but there was nothing sentimental in his approach—'sympathetic without being in any way soft' was how he was aptly described in this Report when he retired. Just and judicious, he kept a sense of humour and of

proportion. Our present students, whether they know it or not, owe him a particular debt for his work as Chairman of the Student Accommodation Committee; he not only spearheaded the drive for more accommodation, which resulted in the remarkable quintuple rise in our stock of student accommodation over less than a decade, but he also initiated the policy of diversifying our kinds of accommodation, to meet students' varying needs. Lord Evans attracted benefactions; Robert McLellan turned these into bricks and mortar in the right ways. Besides this, he was a genial and sociable colleague, and a knowledgeable connoisseur of wine who helped both the College and the Professors' Dining Club to build up their cellars. He kept up a substantial teaching load, in spite of growing administrative burdens. He would have wished no other epitaph than that it should be said of him 'He was a good College man'; and of few people could this ever be said with greater truth.

The College heard with deep regret of the death on 27 October 1973 of Sir John Stevens, Fellow of the College since 1968 and a member of the College Committee from 1970. After joining the College Committee he immediately became Treasurer of the College, as well as Chairman of the Finance Committee and a member of the Investments Committee, and he retained these offices until a few weeks before his death. His wise counsel and his wide experience of financial affairs were invaluable to the College during a period when difficult problems of finance had to be faced.

Other Fellows who died during the year were Major C. J. P. Ball, a former Chairman of the Association of Friends of University College and a benefactor of the College; Sir Robin Darwin, Senior Fellow and formerly Vice-Provost and Rector of the Royal College of Art; Professor G. F. Forsey, Professor Emeritus of Classics and formerly Deputy Vice-Chancellor, University of Southampton; and Philip James, formerly Keeper of the Library, Victoria and Albert Museum, Director of Art, Arts Council of Great Britain, and Secretary and Editor of the Museums Association.

Dr H. G. Poole died on 24 February 1974. He came to the Department of Chemistry from Australia in 1933 and joined the staff in 1938. He was appointed Reader in 1947 and on his retirement in 1970 he continued as an Honorary Research Fellow. During the war, with very few others, he helped to keep the Department running in Aberystwyth, where he was almost solely responsible for the physical chemistry side. He was much concerned with the move back after the war and subsequently helped to design the extensions to the building and other improvements. His research was concerned with

various aspects of spectroscopy. In the early days he collaborated with Ingold and others in an important series of papers on benzene, and latterly he was concerned with very high resolution spectroscopy. He was much involved with the teaching side of the Department and introduced many innovations. His colleagues will long remember him for his loyalty to the Department, his generosity, and his interest in the social activities of the Department and the College. He was a man with a very wide circle of friends.

The death of Joyce Townend on 14 March 1974 ended an association with the College which began in 1925 when she entered the Department of Zoology as a student. She worked briefly for Karl Pearson in the Department of Applied Statistics and Eugenics from 1928, and then in 1932 became research assistant and secretary in the Department of Zoology and began the working partnership with D. M. S. Watson which lasted until he retired to the country in 1965. She served him devotedly, creating the conditions, providing the help, and producing those matchless drawings and illustrations which were essential to his research work. In 1965 she moved to the Department of Egyptology to work upon the Flinders Petrie Collection, where a great task of identification, registration, indexing and arrangement remained to be done, and she continued there until the onset of her last illness. Two long rows of cases down the centre of the museum, illustrating Egyptian daily life 4,000 years ago, testify to the complete success of her work. Joyce Townend was a prominent member of the Women's Staff Common Room and served for a period as its secretary. Always cheerful, friendly, and calm, she met any setback with the utmost good humour and extended to everyone the same kindly help. Her colleagues throughout the College will miss her very much.

Dr D. A. Andersen, an honorary member of the staff of the Department of Chemistry since 1963, died on 4 December 1973, and Professor V. C. A. Ferraro, who held an honorary appointment in the Department of Mathematics, died on 4 January 1974.

P. L. Capper, who died on 23 June 1974 in his seventy-ninth year, had been associated with the College from 1912, when he joined as a Civil Engineering student. After his retirement from the Department of Civil and Municipal Engineering in 1961, which ended forty years' service on the academic staff, he continued to take a keen interest in the affairs of the College, and was President of the Old Students' Association from 1967 to 1969. He served in the Royal Engineers in both world wars and commanded the Engineering Unit of the University of London O.T.C. from 1936 to 1939, having served in the

Unit since 1922. His postgraduate research in photo-elasticity gave him a special interest in stress analysis and this was later extended to the field of soil mechanics. As a result he became the first in Britain to lecture on soil mechanics to students. He is well-known throughout the world for the textbook on Soil Mechanics written jointly with Professor W. Fisher Cassie. His interests ranged widely from railways (he worked as a civil engineer with the Great Northern Railway from 1919 to 1921) to philately, photography, music, travel, and the work of the Christian Church. As well as pursuing these interests he led an active professional life, serving on numerous boards and committees. His devotion to teaching his subject, tempered with a delightful sense of humour, will long be remembered with affection by the many students with whom he came into contact.

Miss Beatrice J. Schlumberger, whose association with the College began when she entered as a student in 1912, died on 4 December 1973. Appointed to an Assistantship in the Department of French in 1917, she retired as a Lecturer in 1955. Known affectionately as 'Schlum' to generations of students of French in the College, she was one of the truly great teachers of her time, not merely in teaching French but in forming minds and above all inculcating intellectual honesty. She enjoyed first the admiration and awe, but then very soon the love of countless students. Miss Schlumberger had a very large share of responsibility for making the French Department of UCL one of the greatest in the country between the wars.

Other former members of the academic staff who died were Professor Sir Denis Brogan, Emeritus Professor of Political Science in the University of Cambridge and Fellow of Peterhouse, Cambridge, a member of the staff of the Department of History from 1928 to 1930; Dr H. R. Ing, Emeritus Reader in Chemical Pharmacology in the University of Oxford, a member of staff first in the Department of Pharmacology and later in the Department of Physiology, Pharmacology and Biochemistry, from 1928 to 1945, and Reader in Pharmacological Chemistry from 1935 to 1945; Miss A. Dorothy Parkinson, a member of the staff of the Department of Phonetics from 1920 to 1949; and Miss Louise W. Stone, a former student in the Department of French and a member of its staff from 1916 to 1918.

The Administration lost a valuable member of its staff by the death on 9 August 1974 of Miss Helen F. Plumbly. She came to the College in 1954, and in 1959 became Alumnus Secretary, with duties concerned mainly with the Fellows and the Friends of the College.

J. H. Nicholls, who had served on the administrative staff for nearly forty-five years until his retirement in 1964, died on 24 February 1974. Appointed in 1919 as Assistant to the Cashier, he later became Assistant Cashier, and in 1948 College Cashier. His helpfulness and quiet efficiency will be remembered by the countless number of students and staff with whom his duties brought him into contact through the years.

In the course of the year the College heard with regret of the death of several former students. Among these were C. W. Judd, Joint President of the United Nations Association; Sir Eric Rideal, the distinguished physical chemist, who as well as being a former student of the Department of Chemistry held a part-time Assistantship there during the session 1918–19; Eric Schilsky, Sculptor and lately Head of the School of Sculpture, Edinburgh College of Art; and Dr I. P. Sheldon-Williams, a hellenist remembered for his work with the British Council abroad as well as for his classical writing.

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APPENDIX I

COLLEGE COMMITTEE

Chairman: Sir Bernard Waley-Cohen, BT, LL.D., M.A.‡
Vice-Chairman: Sir Edward Playfair, K.C.B.‡
Treasurer: F. E. P. Sandilands, C.B.E., M.A.
The Right Hon. Lord Annan, O.B.E., M.A., D.LITT., D.U., *Provost*‡
Sir Desmond Bonham-Carter, T.D.
Mrs Irene Chaplin, B.A., J.P.
Sir Edwin Chapman-Andrews, K.C.M.G., O.B.E., B.A.†
Professor G. C. Drew, M.A.
E. Falk
N. B. Harte, B.SC. (ECON.)
P. W. Heath, B.SC. (ECON.)
Professor K. O. Kemp, B.SC. (ENG.), PH.D., C.ENG., M.I.C.E., M.I.STRUCT.E.
Margaret Marshall, M.A., A.C.I.S.¶
Professor W. R. Mead, D.SC. (ECON.), PH.D., F.D.
Sir Angus Paton, C.M.G., B.SC., C.ENG., F.I.C.E., F.A.S.C.E., F.R.S.†
S. W. C. Phillips, C.B., B.A.†
Janet Powney¶
Professor B. R. Rabin, M.SC., PH.D.
The Hon. Jacob Rothschild
Professor E. H. Scamell, LL.M.
Sir John Stevens, K.C.M.G., O.B.E., D.S.O., T.D.†*
J. Vickers, M.A.¶
B. C. G. Whitaker, B.A.
H. B. Wright, M.B., F.R.C.S.

ASSESSORS

E. C. B. Hall-Craggs, M.A., M.B., B.CHIR., PH.D.
D. Meneer§ (President of the Union)
J. A. Plowright¶
C. Ray (President of the Union)**
A. F. D. Scott, B.SC.
Professor D. A. Turin, DIPL.ARCH., S.C.A., F.I.O.B.
Professor E. H. Brown, M.SC., PH.D. (Dean of Students)
H. Marriott, B.ENG., B.SC. (ECON.), C.ENG., F.I.E.E. (Senior Tutor)

†Fellow of the College. ‡Hon. Fellow of the College. §Membership terminated 30 March 1974. ¶Appointed after 1 October 1973. *Died 27 October 1973. **Member 1973–74; President of the Union from 1 April 1974.

APPENDIX II

PROFESSORIAL BOARD

Chairman: The Right Hon. Lord Annan, O.B.E., M.A., D.LITT., D.U., *Provost*‡

J. D. R. Adams, LL.B., Lecturer in Laws*

J. T. Aitken, M.D., Professor of Anatomy

J. E. Anderson, PH.D., Lecturer in Chemistry*

E. A. Ash, PH.D., D.I.C., A.C.G.I., C.ENG., F.I.E.E., F.I.E.E.E., F.INST.P., Professor of Electrical Engineering

K. B. Atkinson, B.SC., Lecturer in Photogrammetry and Surveying*

R. J. Audley, PH.D., Professor of Psychology

P. R. Banham, PH.D., Professor of History of Architecture

T. Barnard, PH.D., D.I.C., Professor of Micropalaeontology

N. A. Barnicot, PH.D., Professor of Physical Anthropology†

Lisbeth-Anne H. Bawden, M.A., Lecturer in Fine Arts*

W. Beckerman, M.A., PH.D., Professor of Political Economy

P. R. Bell, M.A., Professor of Botany

H. Billett, B.SC.(ENG.), HON.R.C.N.C., C.ENG., M.I.MECH.E., A.F.R.AE.S., Professor of Mechanical Engineering, *Vice-Provost*

Lynn J. Bindman, PH.D., Lecturer in Physiology*

R. E. D. Bishop, PH.D., D.SC.(ENG.), SC.D., HON.R.C.N.C., C.ENG., F.I.MECH.E., A.F.R.AE.S., Kennedy Professor of Mechanical Engineering†

J. W. Black, M.B., CH.B., Professor of Pharmacology

P. J. Bowen, B.SC.(ENG.), PH.D., Lecturer in Physics and Astronomy*

Marian E. A. Bowley, B.SC.(ECON.), PH.D., Professor of Political Economy

R. L. F. Boyd, C.B.E., B.SC.(ENG.), PH.D., C.ENG., F.I.E.E., F.R.S., Professor of Physics

E. H. Brown, M.SC., PH.D., Professor of Geography

E. H. S. Burhop, B.A., M.SC., PH.D., F.R.S., Professor of Physics

J. H. Burns, M.A., PH.D., Professor of the History of Political Thought

P. H. W. Butterworth, PH.D., Lecturer in Biochemistry*

L. Castillejo, M.A., B.SC.(ENG.), Professor of Physics

B. Cheng, LL.D., LIC.-EN-DR., Professor of Air and Space Law

I. R. Christie, M.A., Professor of Modern British History

Sir William Coldstream, C.B.E., D.LITT., Slade Professor of Fine Art†

R. Collins, B.SC., PH.D., C.ENG., M.I.MECH.E., Senior Lecturer in Mechanical Engineering*

R. U. Cooke, M.SC., PH.D., Lecturer in Geography*

D. C. Cooper, PH.D., Professor of Computer Science (from 1 January 1974)

P. E. Corbett, M.A., Yates Professor of Classical Art and Archaeology

P. D. Cowan, DIPL.ARCH., PH.D., R.I.B.A., Professor of Planning Studies

A. L. Cullen, O.B.E., D.SC.(ENG.), C.ENG., F.C.G.I., F.I.E.E., F.I.E.E.E., F.INST.P., Pender Professor of Electrical Engineering

*Elected for membership during Session 1973–74 (College Statute 24(4), Regulation 29); †Fellow of the College. ‡Hon. Fellow of the College.

J. S. Cummins, PH.D., Professor of Spanish
S. P. Datta, B.SC., M.B., B.S., Professor of Medical Biochemistry, *Vice-Provost*†
A. G. Davies, D.SC., F.R.I.C., Professor of Chemistry
D. E. N. Davies, D.SC., C.ENG., F.I.E.E., M.I.E.R.E., Professor of Electrical Engineering
D. G. Davis, PH.D., Senior Lecturer in Physics and Astronomy*
G. D. Dawson, M.SC., M.B., CH.B., Professor of Physiology
D. T. Donovan, D.SC., Yates-Goldsmid Professor of Geology
M. Mary Douglas, M.A., D.PHIL., Professor of Social Anthropology
G. C. Drew, M.A., Professor of Psychology
S. A. Fender, M.A., PH.D., Lecturer in English Language and Literature* (to January 1974)
R. C. Fisher, M.A., PH.D., Senior Lecturer in Zoology and Comparative Anatomy*
P. G. Foote, M.A., FIL.DR., Professor of Old Scandinavian
J. W. Fox, PH.D., F.INST.P., Senior Lecturer in Physics and Astronomy*
R. A. French, M.A., PH.D., Senior Lecturer in Geography*
D. B. Fry, PH.D., Professor of Experimental Phonetics
J. Garside, PH.D., C.ENG., M.I.CHEM.E., Lecturer in Chemical Engineering*
A. C. Gimson, B.A., Professor of Phonetics
T. D. Goddard, A.A.DIPL., R.I.B.A., Senior Lecturer in Environmental Studies*
Frieda Goldman-Eisler, DR.PHIL., Professor of Psycholinguistics
G. P. Goold, A.M., PH.D., Professor of Latin
E. G. Gray, B.SC., PH.D., Professor of Anatomy (Cytology)
A. L. Greenbaum, PH.D., D.SC., Professor of Biochemistry
B. D. Greenslade, M.A., Senior Lecturer in English Language and Literature*
G. V. Groves, M.A., PH.D., Professor of Physics
H. Grüneberg, PH.D., M.D., D.SC., F.R.S., Professor of Genetics
J. R. Hale, M.A., F.S.A., Professor of Italian
E. C. B. Hall-Craggs, M.A., M.B., B.CHIR., PH.D., Reader in Anatomy*
E. W. Handley, M.A., F.B.A., Professor of Greek
R. D. Harkness, B.SC., M.B., B.S., M.R.C.S., L.R.C.P., Professor of Physiology†
D. R. Harris, M.A., B.LITT., PH.D., Reader in Geography*
E. J. Harris, PH.D., D.SC., D.I.C., Reader in Biophysics*
H. Harris, M.A., M.D., F.R.C.P., F.R.S., Galton Professor of Human Genetics
N. B. Harte, B.SC.(ECON.), Lecturer in History*
R. J. Hawkes, PH.D., Lecturer in Environmental Studies*
F. F. Heymann, B.SC.(ENG.), PH.D., Professor of Physics
D. C. Holland, M.A., Professor of English Law
Ted Honderich, B.A., PH.D., Reader in Philosophy*
R. G. Hopkinson, B.SC.(ENG.), PH.D., C.ENG., HON.R.I.B.A., F.I.E.E., F.I.H.V.E., P.P.ILLUM.E.S., Haden-Pilkington Professor of Environmental Design and Engineering
J. Hurstfield, D.LIT., Astor Professor of English History†
Sir Andrew Huxley, M.A., D.SC., M.D., F.R.S., Professor of Physiology and Royal Society Research Professor

*See footnote on p. 110. †Fellow of the College.

R. I. Ireland, B.A., Lecturer in Greek and Latin*
E. R. H. Ivamy, LL.D., Professor of Law†
K. J. Ives, D.SC.(ENG.), PH.D., C.ENG., M.I.C.E., M.A.S.C.E., Professor of Public Health Engineering
D. W. James, M.B., B.S., M.R.C.S., L.R.C.P., Professor of Anatomy
I. E. Tregarthen Jenkin, M.A., Secretary and Tutor, Slade School of Fine Art* (from March 1974)
B. R. Jewell, PH.D., M.B., B.S., Reader in Experimental Physiology*
D. W. J. Johnson, B.A., B.LITT., Professor of French History
M. A. Jones, M.A., D.PHIL., Commonwealth Fund Professor of American History
Sheila Heywood Jones, M.A., PH.D., Lecturer in Psychology*
W. J. D. Jones, B.SC.(ENG.), PH.D., A.R.S.M., D.I.C., A.I.M., Reader in Engineering Metallurgy*
Sir Bernard Katz, M.D., PH.D., D.SC., F.R.C.P., F.R.S., Professor of Biophysics†
K. O. Kemp, B.SC.(ENG.), PH.D., C.ENG., M.I.C.E., M.I.STRUCT.E., Chadwick Professor of Civil Engineering
K. A. Kermack, PH.D., Reader in Vertebrate Palaeontology*
J. F. Kermode, M.A., F.R.S.L., F.B.A., Lord Northcliffe Professor of Modern English Literature
P. T. Kirstein, D.SC., F.I.E.E., F.INST.P., F.B.C.S., Professor of Computer Systems
O. H. G. Koenigsberger, D.ENG., DIP.ENG., R.I.B.A., M.R.T.P.I., Professor of Development Planning
Valentine Korah, PH.D., Reader in English Law*
T. H. Lambert, B.SC.(ENG.), PH.D., HON.R.C.N.C., C.ENG., M.I.MECH.E., Professor of Mechanical Engineering
W. H. A. Larrett, B.A., Lecturer in German*
D. R. Laurence, M.D., F.R.C.P., Professor of Pharmacology and Therapeutics
Annette C. M. Lavers, PH.D., L.ÈS L., D.E.S., Lecturer in French Language and Literature*
A. J. Layton, PH.D., Research Fellow in Chemistry*
D. Lewis, D.SC., F.R.S., Quain Professor of Botany
N. Lichfield, B.SC., PH.D., C.ENG., P.P.R.T.P.I., F.R.I.C.S., M.I.MUN.E., Professor of the Economics of Environmental Planning
D. V. Lindley, M.A., Professor of Statistics
J. M. A. Lindon, B.A., Lecturer in Italian*
The Right Hon. Lord Llewelyn-Davies, M.A., R.I.B.A., F.R.T.P.I., Professor of Urban Planning
The Right Hon. Lord Lloyd, M.A., LL.D., Quain Professor of Jurisprudence†
D. Lowenthal, M.A., PH.D., Professor of Geography
J. Lynch, M.A., PH.D., Professor of Latin American History
A. Maccoll, PH.D., D.SC., F.R.I.C., Professor of Chemistry
T. D. McFarland, M.A., Lecturer in German*
A. Markandya, M.SC., Lecturer in Political Economy*
Sir Harrie Massey, D.SC., PH.D., LL.D., F.R.S., Quain Professor of Physics
A. P. Mathias, PH.D., Professor of Biochemistry

*See footnote on p. 110. †Fellow of the College.

W. R. Mead, D.SC.(ECON.), PH.D., F.D., Professor of Geography
R. Miledi, M.D., F.R.S., Professor of Biophysics
D. J. Millen, PH.D., D.SC., Professor of Chemistry
M. A. Millner, B.A., LL.D., B.C.L., Professor of Law
N. A. Mitchison, D.PHIL., F.R.S., Jodrell Professor of Zoology and Comparative Anatomy
A. D. Momigliano, M.A., D.LITT., F.B.A., Professor of Ancient History
J. L. Mongar, PH.D., Professor of Pharmacology
I. Morris, PH.D., Lecturer in Botany and Microbiology*
J. W. Mullin, PH.D., D.SC., C.ENG., F.I.CHEM.E., F.R.I.C., Professor of Chemical Engineering
J. Musgrove, B.ARCH., R.I.B.A., Professor of Architecture
J. A. North, M.A., D.PHIL., Lecturer in Ancient History*
M. E. O'Neill, M.SC., PH.D., Reader in Mathematics*
J. E. Parkin, PH.D., Lecturer in Chemistry*
E. A. Power, D.SC., PH.D., Professor of Mathematics
Randolph Quirk, M.A., PH.D., D.LIT., Quain Professor of English Language and Literature†
B. R. Rabin, M.SC., PH.D., Professor of Biochemistry
J. C. Rae, R.I.B.A., A.M.R.T.P.I., Lecturer in Environmental Studies*
P. M. Rattansi, M.A., PH.D., Professor of History and Philosophy of Science
K. J. Rawson, R.C.N.C., C.ENG., F.R.I.N.A., Professor of Naval Architecture
J. H. Ridd, PH.D., D.SC., Professor of Chemistry
R. W. Rideout, PH.D., Professor of Labour Law
C. A. Rogers, D.SC., F.R.S., Astor Professor of Mathematics†
P. N. Rowe, B.SC.(TECH.), PH.D., D.SC.(ENG.), C.ENG., F.I.CHEM.E., D.I.C., Ramsay Memorial Professor of Chemical Engineering
E. C. Ryder, M.A., LL.B., Professor of English Law
P. A. Samet, PH.D., F.B.C.S., F.I.M.A., Professor of Computer Science
E. H. Scamell, LL.M., Professor of English Law
G. Schwarzenberger, PH.D., DR.JUR., Professor of International Law
A. F. D. Scott, B.SC., Research Assistant in Physics and Astronomy*
J. W. Scott, B.A., A.L.A., Librarian
M. A. Screech, D.LITT., Fielden Professor of French Language and Literature
M. J. Seaton, PH.D., F.R.S., Professor of Physics†
R. J. Smeed, C.B.E., PH.D., Professor of Traffic Studies
C. A. B. Smith, M.A., PH.D., Weldon Professor of Biometry
H. S. Smith, M.A., Edwards Professor of Egyptology
M. G. Smith, PH.D., Professor of Anthropology
F. Sondheimer, PH.D., F.R.S., Professor of Chemistry and Royal Society Research Professor
Stephen Spender, C.B.E., D.LITT., Professor of English
J. Spraos, M.A., Professor of Political Economy
R. Staveley, B.A., F.L.A., Senior Lecturer in Library, Archive, and Information Studies*

*See footnote on p. 110. †Fellow of the College.

S. Stein, PH.D., Professor of Hebrew
Hannah Steinberg, PH.D., Professor of Psychopharmacology
L. M. Stephenson, B.SC.(ENG.), PH.D., C.ENG., M.I.E.E., Lecturer in Electronic and Electrical Engineering*
J. P. Stern, M.A., PH.D., Professor of German
K. Stewartson, M.A., PH.D., F.R.S., Goldsmid Professor of Mathematics
M. Stone, PH.D., Professor of Probability and Statistics
R. N. Strange, PH.D., Lecturer in Botany and Microbiology*
K. W. Swart, LITT.D.(LEIDEN), Professor of Dutch History and Institutions
J. A. C. Thomas, M.A., LL.B., Professor of Roman Law
E. H. Thompson, O.B.E., M.A., SC.D., F.R.I.C.S., Professor of Photogrammetry and Surveying
M. L. Tobe, PH.D., D.SC., F.R.I.C., Professor of Chemistry
D. A. Turin, DIPL.ARCH., S.C.A., F.I.O.B., London Master Builders Professor of Building
E. G. Turner, M.A., DR.PHIL.ET LETTRES, F.B.A., Professor of Papyrology
V. P. Underwood, PH.D., D.ÉS L., Professor of French
P. Venning, M.S.R., Assistant and Radiographer in Anatomy and Embryology*
C. A. Vernon, D.SC., Professor of Chemistry
B. C. Vickery, M.A., F.L.A., Professor of Library Studies
P. D. Wall, M.A., D.M., Professor of Anatomy
G. L. Watson, M.A., PH.D., D.SC., Professor of Mathematics
N. F. Watson, B.ARCH., R.I.B.A., Bartlett Professor of Architecture
D. J. B. White, PH.D., Senior Lecturer in Botany and Microbiology*
J. E. C. T. White, M.A., PH.D., Durning-Lawrence Professor of the History of Art
G. P. Wibberley, C.B.E., M.S., PH.D., Ernest Cook Professor of Countryside Planning
D. R. Wilkie, M.D., M.B., B.S., F.R.C.P., F.R.S., Jodrell Professor of Physiology†
Elizabeth M. Wilkinson, PH.D., LL.D., D.LITT., F.B.A., Professor of German
P. G. Williams, B.SC., Lecturer in Mathematics*
D. M. Wilson, M.A., F.S.A., Professor of Medieval Archaeology
R. Wilson, PH.D., Perren Professor of Astronomy
K. Wolfenden, M.A., Professor of Information Processing
Richard Wollheim, M.A., F.B.A., Grote Professor of Philosophy of Mind and Logic
E. Yarimer, PH.D., Lecturer in Civil and Municipal Engineering*
J. Z. Young, M.A., D.SC., F.R.S., Professor of Anatomy

ASSESSORS

EX OFFICIO—The Sub-Deans of the Faculties:

Arts: G. F. Arnold, B.A.
Laws: R. H. F. Austin, B.A., LL.M.
Science: C. Dodd, PH.D.†
Engineering: H. Marriott, B.ENG., B.SC.(ECON.), C.ENG., F.I.E.E.
Medical Sciences: Pauline M. Meadow, M.A., PH.D.
Environmental Studies: B. B. Nutt, B.A.

*See footnote on p. 110. †Fellow of the College.

APPENDIX III

HONORARY FELLOW AND FELLOWS

The following elections were made in 1974:

HONORARY FELLOW

Dr Bernard Ashmole, C.B.E., M.C., F.B.A., Fellow of Lincoln College, Oxford, and Honorary Fellow of Hertford College, Oxford; formerly Geddes-Harrower Professor of Greek Art and Archaeology, University of Aberdeen; sometime Yates Professor of Archaeology, University College London, and Lincoln Professor of Classical Archaeology, University of Oxford.

FELLOWS

Dr Leslie Clifford Bateman, C.M.G., F.R.S., formerly Chairman of Malaysian Rubber Research and Development Board, Kuala Lumpur.

Mr Howard Montagu Colvin, C.B.E., F.B.A., Fellow, Tutor in History and Librarian of St John's College, Oxford; Reader in Architectural History in the University of Oxford.

Dr Cyril Dodd, Reader in Physics, University College London; Sub-Dean of the Faculty of Science and Tutor to Science Students.

Professor Frederick Valentine Flynn, F.R.C.P., F.R.C.(PATH.), Professor of Chemical Pathology, University College Hospital Medical School; Consultant Chemical Pathologist, University College Hospital.

Professor Robert Douglas Harkness, Professor of Physiology, University College London, and Supervisor of Dental Students.

The Right Rev. Mark Allin Hodson, lately Bishop of Hereford.

Dr Bernard Howell Leach, C.H., C.B.E., founder and Director of The Leach Pottery, St Ives, Cornwall.

Mr Alexander Taylor Milne, F.R.HIST.S., historian and biographer; formerly Secretary and Librarian, Institute of Historical Research, University of London.

Mr Ronald Robertson Poole, F.I.E.E., F.I.MECH.E., consulting electronics engineer; formerly Chief Engineer, Frigidaire Division, General Motors Limited, and Chief Engineer and Manufacturing Manager, General Motors (France).

Mr David Malcolm Storey, writer and dramatist.

APPENDIX IV

PRINCIPAL CHANGES IN THE ACADEMIC STAFF

FACULTY OF ARTS

ANTHROPOLOGY

Appointments: M. D. C. Gilsenan, B.A., D.PHIL. (Lecturer), formerly Research Lecturer, University of Manchester, and Associate Fellow, St Anthony's College, Oxford.

Mrs Sarah C. L. Humphreys, M.A. (Lecturer), formerly held grant-supported research appointment in Department. (Joint appointment with Department of History.)

Resignation: R. D. Martin, D.PHIL. (Lecturer), to Senior Research Fellowship, Wellcome Institute of Comparative Philology, Zoological Society of London; to be Honorary Research Fellow.

EGYPTOLOGY

Death: Joyce Townend (Assistant).

ENGLISH LANGUAGE AND LITERATURE

Appointment: Mrs Sarah E. Wintle, M.PHIL. (Lecturer), formerly Lecturer, University of Reading.

Resignations: J. Chalker, M.A. (Senior Lecturer), to Chair of English Language and Literature, Westfield College.

J. F. Kermode, M.A., F.R.S.L. (Lord Northcliffe Professor of Modern English Literature), to King Edward VII Chair of English Literature, University of Cambridge.

FINE ARTS

Appointments: P. W. Daglish (Part-time Lecturer).
Rita A. Donagh (Part-time Lecturer).
N. Forster (Part-time Lecturer).
M. G. Moon (Part-time Lecturer).

Resignation: C. A. Rawlence (Part-time Lecturer).

GEOGRAPHY

Appointments: R. J. Bennett, B.A. (Lecturer), from University of Cambridge.
J. E. Thornes, M.SC. (Lecturer), from University of Birmingham.

Resignation: J. H. Johnson, M.A., PH.D. (Reader in Geography), to Chair of Geography, University of Lancaster.

GREEK

Appointment: R. W. Sharples, M.A. (Lecturer), from University of Cambridge.

HEBREW AND JEWISH STUDIES

Retirement: S. Stein, PH.D. (Professor of Hebrew).

HISTORY

Appointments: J. I. Israel, M.A., D.PHIL. (Lecturer), formerly Assistant Lecturer, University of Hull.

Mrs Sarah C. L. Humphreys, M.A. (Lecturer), formerly part-time Lecturer in Department. (Joint appointment with Department of Anthropology.)

Resignations: J. Lynch, M.A., PH.D. (Professor of Latin American History), to Directorship, Institute of Latin American Studies; to be Honorary Research Fellow.

HISTORY OF ART

Appointment: Deborah J. Howard, M.A., PH.D. (Lecturer), formerly Leverhulme Fellow in Department of History of Art, University of Cambridge.

LATIN

Appointment: R. W. Sharples, see GREEK.

LIBRARY, ARCHIVE AND INFORMATION STUDIES

Appointment: B. C. Vickery, M.A., F.L.A. (Professor of Library Studies), formerly Assistant Director of Aslib.

Retirement: Mary Piggott, B.A., F.L.A. (Senior Lecturer).

PHILOSOPHY

Resignation: J. A. W. Kamp, PH.D. (Lecturer), to Lectureship, Bedford College, London.

Mrs Gillian M. Keene, B.A. (Part-time Lecturer).

PHONETICS AND LINGUISTICS

Retirements: Mrs Frieda Goldman-Eisler, DR.PHIL. (Professor of Psycholinguistics); to be Honorary Research Fellow.

Marguerite Chapallaz, M.A. (Lecturer); to be Honorary Research Fellow.

POLITICAL ECONOMY

Appointment: D. E. Goodman, B.SC.(ECON.), PH.D. (Lecturer), formerly Research Fellow, London School of Economics and Political Science.

Retirement: Marian E. A. Bowley, B.SC.(ECON.), PH.D. (Professor of Political Economy); to be Honorary Research Fellow.

SCANDINAVIAN STUDIES

Appointments: J. A. Graham-Campbell, M.A. (Lecturer), from University College, Dublin.

Jørgen H. Jørgensen (Queen Alexandra Lecturer in Danish), from Royal Library, Copenhagen.

FACULTY OF LAWS

LAWS

Appointments: I. H. Dennis, M.A. (Lecturer), formerly Lecturer, The Council of Legal Education, Inns of Court School of Law.

Mrs Elizabeth Freeman, B.A., LL.M. (Lecturer), formerly Weiner-Anspach Scholar, Institut d'Etudes Européenes, Brussels.

Master I. H. Jacob, LL.B. (Visiting Professor), a Master of the Supreme Court, Queen's Bench Division, and formerly Honorary Lecturer in the Department.
A. D. E. Lewis, B.A., LL.B. (Lecturer), formerly Lecturer, University of Birmingham.
R. Venables, M.A. (Lecturer), from Merton College, Oxford.

Resignations: E. D. Brown, B.L., LL.M., PH.D. (Reader in International Law), to Chair of Law, University of Wales Institute of Science and Technology.
D. C. Holland, M.A. (Professor of English Law), to Professorship of Law, University of Western Ontario.
Mrs Winifred H. Holland, LL.B. (Lecturer), to Associate Professorship of Law, University of Western Ontario.

FACULTY OF SCIENCE

ANIMAL GENETICS

Retirement: H. Grüneberg, PH.D., M.D., D.SC., F.R.S. (Professor of Genetics); to be Honorary Research Fellow in Department of Human Genetics and Biometry.

BOTANY AND MICROBIOLOGY

Appointments: M. C. W. Evans, PH.D. (Reader in Plant Chemistry), formerly Lecturer, King's College, London.
R. Phillips, PH.D. (Lecturer), from University of Cambridge.

CHEMISTRY

Death: H. G. Poole, PH.D. (Honorary Research Fellow; formerly Reader in Chemistry).

MATHEMATICS

Appointment: J. E. Jayne, A.B., M.A., PH.D. (Lecturer), formerly held temporary appointment in Department.

PHYSICS AND ASTRONOMY

Appointments: M. M. Dworetsky, PH.D. (Lecturer), formerly Carnegie Fellow, The Hale Observatories, Pasadena, California.
W. R. Newell, PH.D. (Lecturer), from University of Southampton.
J. H. Parkinson, PH.D. (Lecturer), from University of Leicester.
S. J. Sharrock, PH.D. (Lecturer), formerly held research appointment in Department.

PSYCHOLOGY

Appointments: D. W. Green, PH.D. (Lecturer), formerly held grant-supported research appointment in Department.
E. J. Hammond, M.SC. (Lecturer), formerly held grant-supported research appointment in Department.

STATISTICS AND COMPUTER SCIENCE

Appointments: D. C. Cooper, PH.D. (Professor of Computer Science), formerly Professor of Computer Science and Head of the Computation Services Department, University College of Swansea.
G. Davies, M.SC. (Lecturer), formerly Lecturer, Institute of Computer Science.
C. D. Easteal, B.SC., M.ENG. (Senior Lecturer), formerly Senior Lecturer, Institute of Computer Science.

P. T. Kirstein, D.SC., F.I.E.E., F.INST.P., F.B.C.S. (Professor of Computer Systems), formerly Professor of Computer Systems, Institute of Computer Science.
C. J. Lloyd, M.SC. (Lecturer), formerly Lecturer, University College of Swansea.
E. Nixon, B.SC. (Senior Lecturer), formerly Senior Lecturer, Institute of Computer Science.
W. L. B. Nixon (Senior Lecturer), formerly Senior Lecturer, Institute of Computer Science.
J. Washbrook, M.SC. (Lecturer), formerly Lecturer, Institute of Computer Science.
S. R. Wilbur, M.SC. (Lecturer), formerly Lecturer, Institute of Computer Science.
K. Wolfenden, M.A. (Professor of Information Processing), formerly Professor of Information Processing, Institute of Computer Science.

Resignation: Mrs Jane I. Galbraith, M.A., M.SC. (Lecturer); to be Honorary Lecturer.

ZOOLOGY AND COMPARATIVE ANATOMY

Resignation: A Comfort, M.A., M.B., B.CH., PH.D., D.SC., D.C.H. (Director of Research in Gerontology), to Senior Fellowship, Center for the Study of Democratic Institutions, Santa Barbara.

FACULTY OF ENGINEERING

CIVIL AND MUNICIPAL ENGINEERING

Appointments: J. Roorda, B.A.SC., PH.D. (Visiting Professor), Associate Professor, Department of Civil Engineering, University of Waterloo, Ontario.
D. A. Okun, M.S., SC.D. (Visiting Professor), Professor of Environmental Engineering, University of North Carolina.

ELECTRONIC AND ELECTRICAL ENGINEERING

Resignation: P. A. Matthews, B.SC.(ENG.), PH.D., C.ENG., M.I.E.E. (Reader in Electrical Engineering), to a Chair of Electronics, University of Leeds.

MECHANICAL ENGINEERING

Appointments: H. G. Maule, M.A., PH.D. (Senior Lecturer), formerly Senior Lecturer, London School of Hygiene and Tropical Medicine.
D. R. Pattison, R.C.N.C., M.R.I.N.A. (Lecturer), from Royal Corps of Naval Constructors.

Resignation: C. V. Betts, M.A., R.C.N.C., C.ENG., M.R.I.N.A. (Lecturer), to Ministry of Defence, Ships Division, Bath.

FACULTY OF MEDICAL SCIENCES

ANATOMY AND EMBRYOLOGY

Retirements: N. J. B. Plomey, M.SC. (Senior Lecturer).
J. Z. Young, M.A., D.SC., F.R.S. (Professor of Anatomy).

PHARMACOLOGY

Appointments: J. W. Black, M.B., CH.B. (Professor of Pharmacology), formerly Associate Research Director, Smith Kline and French Research Institute, Welwyn Garden City.

PHYSIOLOGY

Appointment: Mrs Lynn J. Bindman, PH.D. (Lecturer), formerly held part-time appointment in Department.

FACULTY OF ENVIRONMENTAL STUDIES

SCHOOL OF ENVIRONMENTAL STUDIES

Appointment: M. S. Symes, M.A., DIP.ARCH. (Lecturer), previously held Social Science Research Council award at Architectural Association.

Resignations: H. H. Moss, B.A., M.ARCH. (Lecturer), to private practice.
Mrs Joan Davidson, M.A., M.SC. (Lecturer).

APPENDIX V

PUBLIC LECTURES

ENDOWED LECTURES

CHAMBERS MEMORIAL LECTURE

Professor Dorothy Whitelock: 'Some Anglo-Saxon Bishops of London'

JOHN COFFIN MEMORIAL LECTURE

Professor Joel Hurstfield: 'The Historian as Moralist: Reflections on the Study of Tudor England'

COMMONWEALTH FUND LECTURE

Professor John Hope Franklin, Chicago: 'George Washington Williams and the beginnings of Afro-American Historiography'

HOBHOUSE MEMORIAL LECTURE

The Rev. Professor A. D. Galloway, Glasgow: 'The Meaning of Feuerbach'

THE NEALE LECTURE IN ENGLISH HISTORY

Professor S. T. Bindoff, Queen Mary College: 'The Fame of Sir Thomas Gresham'

LORD NORTHCLIFFE LECTURES IN LITERATURE

Dr Frances A. Yates: 'Shakespeare's Last Plays: A New Approach' (four lectures)

SHEARMAN MEMORIAL LECTURES

Professor Saul A. Kripke, Rockefeller University: 'Empty Reference' (three lectures)

INAUGURAL LECTURES

Professor J. W. Black, Professor of Pharmacology: 'Looking for New Drugs'
Professor G. P. Goold, Professor of Latin: 'Interpreting Catullus'
Professor M. A. Jones, Commonwealth Fund Professor of American History: 'The Old World Ties of American Ethnic Groups'
Professor D. Lowenthal, Professor of Geography: 'Past time, present place: landscape and memory'
Professor K. J. Rawson, Professor of Naval Architecture: 'Maritime decisions, Decisions'
Professor R. W. Rideout, Professor of Labour Law: 'The Place of Legislation in Labour Law'
Professor B. C. Vickery, Professor of Library Studies: 'The Communication of Information as a Field for Academic Research'

LUNCH-HOUR LECTURES AND FILMS

LECTURES

Mr M. P. Barnes: 'Faroese—A Scandinavian Language in the Making'
Dr W. F. Bynum: 'Are Mental Diseases Real Diseases?'

Dr C. L. Crawford: 'Leprosy—Cause for Optimism'
Mr J. M. Dodgson: 'The Seventh Century Frontier of Wales'
Mr D. H. Girmes: 'Gambling Strategies and Cheating'
Mr S. G. B. Henry: 'Unemployment in the United Kingdom'
Professor J. Hurstfield: 'The Illusion of Power: Some Implications of Watergate'
Mr R. I. Ireland: 'The Ceremonies of the Byzantine Court'
Dr T. W. Jones: 'From Quarks to Quasars—The Universe in View'
Professor D. V. Lindley: 'How to Make Decisions'
Dr D. McNally: 'Comets'
Mr A. N. Maxwell: 'The Aims of Science'
Dr W. G. Moore: 'The Comedy of Knowledge'
Dr A. M. O'Connor: 'The Regional Development Dilemma in African Countries'
Dr T. A. Quilliam: 'Survival or Oblivion: The Dilemma of a Desert People in Arizona'
Professor Stephen Spender: 'Should Poets have candid Biographers?'
Dr W. R. Eatock Taylor: 'Offshore Structures—the Challenge of the North Sea'
Professor V. P. Underwood: 'Rimbaud's London Hell'
Dame Veronica Wedgwood: 'Some Writers and Artists in The Civil War, 1642–46'
Miss Helen D. Weston: 'The Influence of Japan on Western Art, c.1860–1900'
Dr D. J. B. White: 'Gower Street Botanists—1826–1956'
Mr Frank Whitford: 'James Ensor and Belgian Expressionism'
Professor Richard Wollheim: 'Utilitarianism Under Attack'

FILMS

'The Ragged Revolution' (a compilation film, produced by Tony Essex, containing rare footage of the Mexican Revolution which overthrew the dictatorship of Porfirio Diaz), introduced by James Leahy
'Classical Music of North India' (with Ali Akbar Khan. Filmed and recorded for the University of Washington Archives of Ethnic Music and Dance) and 'The Sword and the Flute' (a study of Indian miniature paintings of the 16th Century. Produced, written and directed by James Ivory. Music by Ali Akbar Khan, Ravi Shankar and others)*
'Van Gogh' (the famous documentary by Alain Resnais, Gaston Diehl and Robert Hessens) and 'Corot' (a film by Roger Leenhardt)*
'Sitting Bull' (a documentary about the Sioux nation and its great leader, written and directed by Dennis C. Pope)*
'Turner' (an Arts Council film written and directed by David Thompson, music by Elisabeth Lutyens) and 'The Story of Spring' (L'Allegoria della Primavera) (a film by Luciano Emmer and Enrico Gras on Botticelli)*
'Laser Light' (written and produced by Earle Luby)*
'Cradle of Genius' (a documentary by Paul Rotha on the Abbey Theatre, Dublin) and 'Faithful Departed' (directed by Kiera Hickey)*

LECTURE ARRANGED BY COLLEGE DEPARTMENT

LAWS

Mr P. B. H. Birks, Fellow of Brasenose College, Oxford: 'Restitution for Services'

*Introduced by a member of the Slade School Film Unit

APPENDIX VI

NUMBERS OF STUDENTS, 1973–74

	Under-graduate	*Post-graduate*	*Totals*
Faculty of Arts	1,228 (284)	479 (174)	1,707 (458)
Department of Political Economy ..	192	26 (3)	218 (3)
Slade School of Fine Art	81 (7)	114 (17)	195 (24)
	1,501 (291)	619 (194)	2,120 (485)
Faculty of Science	1,168 (3)	*583 (126)	1,751 (129)
Faculty of Medical Sciences	274 (3)	1 (1)	275 (4)
Faculty of Engineering	363 (2)	236 (46)	599 (48)
Faculty of Laws	†321 (23)	‡155 (37)	476 (60)
Faculty of Environmental Studies ..	158	243 (57)	401 (57)
	3,785 (322)	§1,837 (461)	5,622 (783)

The figures in brackets indicate the number of part-time students included in the total under each head.

*This figure includes 88 full-time and 27 part-time students working in the College Faculty of Medical Sciences who were registered in the University Faculty of Science.

†This figure includes 18 full-time undergraduate students studying for a B.Sc. in International Relations who were registered in the University Faculty of Economics

‡This figure includes 10 full-time students and 1 part-time student studying for an M.Sc. in International Relations who were registered in the University Faculty of Economics.

§Of this number 1,414 were registered for higher degrees of the University of London; the remainder were working for higher diplomas of the University or of the College, or for the higher degrees of other Universities, or were engaged in research work, or attending postgraduate lecture courses.

APPENDIX VII

GEOGRAPHICAL DISTRIBUTION OF STUDENTS, SESSION 1973–74

	Under-graduate	*Post-graduate*	*Totals*
UNITED KINGDOM	3,229	1,131	4,360
BRITISH COMMONWEALTH OF NATIONS			
Australia	7	28	35
Canada	17	79	96
Cyprus	33	9	42
Hong Kong	10	6	16
India	22	42	64
Kenya	3	4	7
Malaysia	33	27	60
Nigeria	11	21	32
Sri Lanka	11	18	29
12 other countries	28	13	41
OTHER PARTS OF THE WORLD			
Brazil	2	10	12
Egypt	1	16	17
Eire	9	6	15
France	42	10	52
Greece	29	61	90
Iran	25	29	54
Iraq	6	21	27
Japan	3	8	11
Pakistan	21	12	33
South Africa	8	13	21
Spain	6	7	13
Turkey	6	21	27
U.S.A.	90	107	197
Venezuela	7	6	13
West Germany	27	12	39
49 other countries (including 9 stateless students)	99	120	219
	3,785	1,837	5,622

SUMMARY

United Kingdom	4,360
British Commonwealth of Nations	422
Other parts of the world	840
	5,622

APPENDIX VIII

ADMISSION OF FIRST DEGREE AND FIRST DIPLOMA STUDENTS SESSION 1973–74

FACULTY OF ARTS	*Students admitted October* 1973
B.A. Honours	
Ancient History & Social Anthropology	4
Anthropology & Linguistics	7
Archaeology—Anglo-Saxon	7
Archaeology—Classical	2
Classics	10
English	48
English & History of Art	5
English & Linguistics	5
French	31
French & History of Art	2
French & Linguistics	2
Geography	49
German	14
German & History of Art	1
German & Linguistics	2
German & a Scandinavian Language	9
Hebrew	6
Hebrew & Jewish Studies	3
History (Ancient & Medieval)	5
History (Medieval & Modern)	42
History & History of Art	5
Italian	3
Italian & History of Art	4
Modern Iberian & Latin American Regional Studies	12
Norwegian & Icelandic	2
Philosophy	23
Philosophy & Economics	1
Philosophy & Greek	2
Philosophy & History of Art	2
Philosophy & Linguistics	3
Scandinavian Studies	11
	322
B.Sc. (Econ.)	67
University Diploma in Fine Art	13

	Students admitted October 1971
FACULTY OF SCIENCE	
B.Sc. Degree	
Anthropology	31
Astronomy	22
Biochemistry	29
Biology	20
Botany	4
Chemistry	58
Chemistry & Physics	6
Geography	31
Geology	20
Mathematics	50
Microbiology	22
Pharmacology	8
Physics	24
Physics (Applied)	4
Physiology	10
Psychology	50
Statistics	8
Statistics & Computer Science	5
Zoology	25
	427
FACULTY OF LAWS	
LL.B.	105
FACULTY OF ENGINEERING	
B.Sc.(Eng.)	
Civil & Municipal Engineering	39
Electronic & Electrical Engineering	30
Mechanical Engineering	16
Mechanical Engineering (Naval Architecture)	11
Chemical Engineering	15
Biochemical Engineering	7
	118
FACULTY OF MEDICAL SCIENCES	
2nd M.B.	116
2nd B.D.S.	52
	168
FACULTY OF ENVIRONMENTAL STUDIES	
B.Sc. Degree in Architecture, Planning, Building and Environmental Studies	51
Total	1,271

APPENDIX IX

UNIVERSITY FIRST DEGREE AND DIPLOMA AWARDS

1 OCTOBER 1973—30 SEPTEMBER 1974

FACULTY OF ARTS

B.A. Degree	*1st Class Honours*	*2nd Class Honours Upper Div.*	*Lower Div.*	*3rd Class Honours*	*Pass*	*Total*
Archaeology	—	—	—	1	—	1
Classics	2	2	6	3	—	13
English	3	16	14	8	—	41
French	3	7	6	5	—	21
Geography	1	25	15	—	—	41
German	1	6	10	1	—	18
Hebrew	—	2	1	—	—	3
History	1	20	15	2	—	38
Italian	—	4	7	—	—	11
Latin	—	—	—	1	—	1
Modern Iberian and Latin American Regional Studies	—	4	3	1	—	8
Philosophy	—	4	11	—	—	15
Scandinavian Studies	—	1	—	—	—	1
Anthropology and Linguistics	—	3	—	1	—	4
English and History of Art	—	2	—	—	—	2
French and History of Art	—	2	1	—	—	3
French and Linguistics	—	—	1	—	—	1
German and History of Art	—	—	—	1	—	1
German and Linguistics	—	—	1	1	—	2
German and Swedish	—	2	—	—	—	2
History and History of Art	1	1	2	—	—	4
Italian and History of Art	—	—	1	—	—	1
Philosophy and Economics	—	1	—	1	—	2
Philosophy and Linguistics	—	1	—	—	—	1
	12	103	94	26	—	235

B.A. Degree (Aegrotat)					*Pass*	*Total*
Classics	—	—	—	—	1	1
History	—	—	—	—	1	1
Philosophy and History of Art	—	—	—	—	1	1

University Diploma in Fine Art: 19 students passed.

FACULTY OF LAWS

	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
LL.B. Degree	4	13	42	13	1	73
LL.B. Degree (Aegrotat)	—	—	—	—	1	1

FACULTY OF SCIENCE

B.Sc. Degree	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
Anatomy	3	9	1	—	—	13
Anthropology	2	14	6	2	—	24
Applied Physics	2	3	7	3	4	19
Architecture, Planning, Building and Environmental Studies	3	7	15	5	5	35
Astronomy	2	4	8	3	—	17
Biochemistry	1	7	6	6	—	20
Botany	—	1	3	1	—	5
Chemistry	6	16	12	13	5	52
Chemistry and Physics	3	2	—	1	—	6
Combined Science	—	—	—	—	1	1
Genetics	—	—	1	—	—	1
Geography	2	8	10	2	—	22
Geology	—	3	7	2	—	12
Human Biology	1	1	2	—	—	4
Immunology	1	3	2	2	—	8
Information Studies	—	—	2	—	—	2
Mathematics	7	9	19	9	2	46
Microbiology	2	10	12	—	—	24
Pharmacology	1	10	3	—	—	14
Physics	5	6	5	3	2	21
Physiology	4	8	6	—	—	18
Psychology	6	16	9	1	—	32
Statistics	—	6	4	2	—	12
Zoology	3	9	5	1	—	18
	54	152	145	56	19	426

FACULTY OF ENGINEERING

	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Total
B.Sc. (Engineering) Degree	9	19	21	21	12	82
B.Sc. (Engineering) Degree in Chemical Engineering	2	5	9	2	12	30
B.Sc. (Engineering) Degree in Chemical Engineering (Aegrotat)	—	—	—	—	1	1

FACULTY OF ECONOMICS

	1st Class Honours	2nd Class Honours Upper Div.	2nd Class Honours Lower Div.	3rd Class Honours	Pass	Tota
B.Sc. (Economics) Degree	1	16	31	5	1	54
B.Sc. in International Relations Degree	1	4	3	—	—	8

FACULTY OF MEDICINE

Basic Medical Sciences and Pharmacology Examination: 101 students passed.
Second Examination for Dental Degrees: 40 students passed.

APPENDIX X

UNIVERSITY HIGHER DEGREE AND HIGHER DIPLOMA AWARDS
1 OCTOBER 1973—30 SEPTEMBER 1974

FACULTY OF ARTS

Ph.D. *Anthropology:* Anne V. Akeroyd, Reginald F. Byron. *Archaeology:* Christopher A. Powell. *Architecture:* Donald S. Lyall. *English:* Gerald C. Hammond, Elizabeth M. Heale, Gregory A. F. Hollingshead, Roger A. Horrocks, †Ruth M. Kempson, Shlomith Rimmon. *Geography:* Aileen M. Carpenter, Griffiths L. Cunningham, Denis J. B. Shaw. *Greek & Latin:* David N. Sedley. *Hebrew:* Benjamin J. Gelles, Ada Rapoport-Albert, Michael P. Weitzman. *History:* Rose M. J. Buechler, Michael R. A. Harris, William A. Irvine-Fortescue. *Psychology:* Gerald A. Tolliver, David A. Warden. *Scandinavian Studies:* Geraldine R. Barnes. *Spanish:* Robert W. H. Castleton. *Town Planning:* Philip R. Whitbourn. [25]

M.Phil. *Anthropology:* Michael A. Onwuejeogwu, Ted R. Polhemus, Maria T. San Roman Espinosa. *History:* Anthony G. Ruffhead. *Library & Information Studies:* Rosemary Taylor. *Philosophy:* John C. Rodolff, Stephen T. Sommerville. *Town Planning:* David F. Bailey, Brian F. Bolam, Paul Butler, Patricia A. B. Chambers, Richard M. Cox, Carol Crawshaw, William McL. Edgar, John B. Elkington, Anthea M. Ewbank, Michael A. Harbron, Dianne Hinks-Edwards, Seiso D. Liphuko, Jon Lloyd, Richard J. Lloyd, Rupert G. N. Nabarro, Alistair C. Robson, Jeffrey Stevenson, Corinne J. Swain, Keith S. Walmsley, Julian M. Wells, Peter G. E. Wyeth. [28]

M.A. (new Regs) *Architecture:* Alfred E. Bews, Slobdanka Dragosavljevic, Chariklia Drakou, John Hadidian, Martin Lemarie, Robert, P. Stewart, Richard L. Wilson. *Area Studies:* Norman E. Cox, Garry Jones, Hal P. Klepak, Patricia H. Reed, Richard G. Rollefson, Wilter Santiago. *Classics:* Warren D. Snowball. *English:* Bruce D. Davison. *German:* Steven G. Moody. *Library & Information Studies:* Thelma R. H. Bristow, Margaret A. Cookes, Antony Croghan, Ronald F. Eatwell, John B. Ferguson, *Andrew J. Flavell, Michael J. Greenhalgh, Courtney S. Hannabuss, Sybil C. Haworth, John B. Hepworth, Muriel J. Higginson, Clive Hurst, *Alan D. Jones, Roy F. E. Knight, Linda C. Lagden, Patricia M. Larby, Benjamin W. K. Matogo, *Susan Morrell, Mary A. Rudland, Richard M. Smith, Ronald G. Surridge, *Malcolm B. Stevenson, Sheila M. Strongman, Geraldine A. Swann, William E. Umbima, *Bernard J. S. Williams. *Linguistics:* *Valerie M. Murray. *Phonetics:* Alec J. C. Pongweni, Jean Robinson. [44]

University Postgraduate Diplomas: Archive Studies 15‡; Classical Archaeology 1; Fine Art 34; Library and Information Studies 1; Linguistics 1; Physical Anthropology 2; Social Anthropology 3§; Town Planning 5. [61]

*Awarded a mark of distinction. †Also registered at another Institution. ‡3 Candidates awarded marks of distinction. §1 Candidate awarded mark of distinction.

FACULTY OF ECONOMICS

Ph.D. *Laws:* Kinnas Ioannis, Frances M. Pinter. [2]

M.Sc. *Economics:* Jean E. Fawcett, Sally J. Harrison, Jeffrey E. Hollingworth, Geoffrey R. Horton, *Katharine J. Maundrell, Gillian M. Noble, Ian S. T. Senior, Hebe Tassopoulou, Joan E. Wilcox. *International Relations:* Mustafa A. O. Arbab, Malcolm C. J. E. Root, Teresita Saldivar Sali, Anwar G. M. Shawky, Cynthia Toledano. *Planning Studies:* Catherin Photinopoulou. [15]

FACULTY OF LAWS

Ph.D. Catherine M. Green, Peter T. O'Neill. [2]

M.Phil. Anthony G. Gavanas [1]

LL.M. Kwadwo Apeah-Kubi, Peter M. Armstrong, Michael R. Barnes, Oliver J. Beaumont, Gayton Beckett, R. Scott Blaze, Garrick C. Bond, Harry G. A. Browne, Hrishiranjan Chakrabarti, *David R. Childs, Peter M. Cohen, Anthony J. Croft, James J. Cunningham, Helene Deslauriers, Rolf Fischer, David E. Frasch, Alison A. Green, Ian L. Hewitt, Peter Hoenig, Milan Herceg, Richard L. Jarashow, David L. Jones, Fuad P. A. Kattan, William Kattan, Walter W. L. D. Knott, Oddvar Leira, David MacFarlane, Graeme I-K. MacNish, Jill E. Martin, Fiona E. Middleton, Duncan B. W. Ouseley, Harpal K. Pall, Michael G. Pateras, Norris H. Pratt, George A. Quadrino, Derek B. Rankin-Reid, Johannes P. G. Riedel, Ahmad Saeed, Mona K. Scipio, Lurline E. Stanford, Bruce L. Thompson, George A. Tsavliris, Jorge R. Vigil, Peter C. Williams, Constantine Yiannacopoulos, Colin A. Ying. [46]

University Postgraduate Diploma: Shipping Law 17. [17]

FACULTY OF SCIENCE

Ph.D. *Anatomy and Embryology:* Margaret M. Bird, Andrew R. Cunningham, George D. Gaffan, Stephen P. Hunt, Oliver T. Phillipson, Kwok H. Sit. *Anthropology:* Suzette S. Heald, Kerry E. James, Julia M. Naish. *Architecture:* †Eric M. McKay, Alexander A. L. Reid. *Biochemistry:* Malcolm B. Allen, Sarah J. Flint, †Harriet E. Harris, David Hewett-Emmett, Andrew McD. Holmes, Anthony D. Karger, Margarita Ledezma-Ruiz, Barbara H. Moreland, David Ridge, Peter F. Smyth, Bryan M. Turner. *Biophysics:* James A. Bangham. *Botany and Microbiology:* Ahmed Nuzhat, Sirag A. Ibrahim, †Richard Mallaby, Terence C. Marks, Arnold Rainbow, Ian R. Rowland, Roger Watson. *Chemistry:* John Barnard, Cristopher M. Bowes, Barry K. Carpenter, Jan A. Gutowski, Robin Hanford, Graham J. Hughes, Gonzalo Martin Martinez, †Colin Nave, Anthony N. Rail, Mark Underhill. *Geography:* Richard J. Huggett, Wilfred F. I. Mlay, Roger F. Tomlinson, ‡Cyril G. Tuckfield. *Geology:* §Aydogan Boray, Ibrahim A. H. Ismail, Freedom G. A. Ogbe, Pakdi Thanvarachorn. *History and Philosophy of Science:* Rachel C. Bush. *Human Genetics:* Peter J. L. Cook, Christine B. Marenah. *Mathematics:* Michael J. Cohn, Adam, J. T. M. Ostoja-

*Awarded a mark of distinction. †Also registered at another Institution. ‡External student. §Awarded 1973 but not included in 1973 Annual Report.

Ostaszewski. *Pharmacology:* Colin R. Gardner, Rose E. Hartley, Stephen W. Killick, †Barbara Nunn, John C. Foreman. *Physics and Astronomy:* Jack A. Alvarez, Hasna Banu, John A. Barker, David H. Brabban, Adrian M. Cruise, John K. Davies, †John R. Dudeney, Jacques A. R. Duibau, David Ezra, Robin M. Freeman, Ian Furniss, John R. H. Herring, Robert G. Kosmider, Helen E. Mason, Maureen P. Neal, Timothy G. Pett, Andrew R. Pickering, David R. Quarrie, David M. Watson, John B. Wells, Anthony P. Wynter, Muhammad S. U. Zafar. *Physiology:* Stuart J. Bevan, Hugh Bostock, Lydia M. Brocklehurst, Nicholas P. Holmes, Brian J. McCabe, John M. Reynolds, Mary F. Venn, Adrian Verrinder. *Psychology:* Philip J. Barnard, Paul F. Byerley, Esther Saraga. *Statistics and Computer Science:* ‡Thomas Leonard, Abimbola S. J. H. Young. *Zoology and Comparative Anatomy:* †Robert F. Brooks, John G. Maisey, †Philip D. Minor. [96[

M.Phil. *Anatomy and Embryology:* Alexander Campbell. *Anthropology:* Anne M. Bailey, Marilyn J. Houlberg, Steven R. Johnson, Michael Nicod, John R. O. Ojo. *Chemistry:* Peter Howes. [7]

M.Sc. *Architecture:* Maha Ahmed El-Bakry, Anna Arvanitaki, Raymond J. W. Bale, Juliana C. Ballian, Rina Barkai, Richard H. Bennett, Ana Brumlik De Maneiro, Peter Hipkiss, Ian G. Jennings, Zina T. Kafilmout, Stuart J. Mackrell, Geoffrey K. Payne, James T. Smith, Robert E. Wood, Athanassia Xanalatou. *Biochemical Engineering:* *David J. Doyle, *Arnaldo Garcia Y Pena, Michael D. Housham, Sangarapillai Sivapathasundaram, Ambalavanar Thiruvathavoorar, Graham, L. Wagner. *Biochemistry:* Jane A. Davies, Jennifer K. De-Vriendt, Josephine U. Dyer, Patricia J. Lobo, John G. Tringham. *Conservation:* Philip L. Armitage, Allan T. Carr, Michael G. Crafer, Edilberto J. Ferrer-Veliz, Richard J. Keymer, Peter R. Marren, Bryan H. R. T. Rippey. *Educational Psychology:* Margaret S. Baldwin, Marion E. Polichroniadis, Hedy Firth, Paul J. Flack, Timothy J. Harper, Geraldine M. Peirce, Helen J. Twiddy, John W. Warner, John D. Woodhouse. *Geography:* Alfred E. Wilson. *Hydrogeology:* Abdul W. Assefi, Stephen Bennett, John V. Goldhawk, Jubril A. Hanidu, John A. Hibbitt, Michael A. Imosemi, Stephen T. Miller, Botlalo Motsete, Cesar O. Rodriguez, Graham C. Slessar, Syed Khalid Ali, Michael Wainwright. *Information Science:* Terence S. Sherwood. *Marine Earth Science:* Keith H. Back, John A. Dangerfield, James G. Ford, Kenneth Hayes, Gordon T. Jones, Edwin R. Manning, Richard F. Mead, David R. Tappin. *Micropalaeontology:* John D. Roberts, Graham T. Wright. *Neurological Science:* Michalakis Petrides, David A. Winfield. *Physiology:* Char-Nie Chen. *Statistics:* Alexander C. S. Allan, Seyed S. Khalessi-Hosseini, Kevin J. McConway, Christine Priest. *Vertebrate Palaeontology:* Christopher J. Duffin. [95]

FACULTY OF ENGINEERING

Ph.D. *Chemical:* Alan W. Brench, John A. Goldsmith, Claire J. L. Macleod, Derek J. Wisdom. *Civil and Municipal:* Mohamed El Nashie, Suzanne P. Evans, Philip B. Goodwin, Ian S. Jones, Geoffrey M. Lewis.

*Awarded a mark of distinction. †Also registered at another Institution. ‡External student.

Electronic and Electrical: Chan Chack Kuen, †John R. Grierson, Stephen A. Nokes, Saad S. Saad, Ernst F. Scherer. *Mechanical:* Royston K. Burcher, William E. Cowley. [16]

M.Phil. *Civil and Municipal:* Esmail Ayati. *Mechanical:* †Douglas J. Fullbrook. [2]

M.Sc. *Biochemical Engineering:* David R. Bewley, *Desmond M. McM. Calnan, Christine M. Carley, *Miranda Chua Gek Sim, Stephen J. R. Halfacre, Ian G. L. Maitland, Joseph A. McKee, *Stephen W. Smith, Geoffrey D. Spriegel, Lyndon L-S. Wou. *Ergonomics:* David W. Brown, Keith D. McGolphin, Adrian N. Wickens. *Mechanical Engineering:* William C. Banks, Brian P. Gates, Jeffrey E. King, Stephen H. L. Parfitt, Evan G. H. Rees. *Microwaves and Quantum Electronics:* Satish M. Bhide, Bimal K. Deka, Jimmy F. Dholoo, Youssef Kalatizadeh, Javad Sharifi, Richard S. Thompson, Lakshaman M. Walpita. *Naval Architecture:* Michael R. Bailey, *Trevor J. Cook, Nicholas S. Coronis, David Crichton, Ian R. Kennett, Alistair R. McIntosh, Anthony H. Monks, Adrian Needham, Mark A. Oxley, John R. Ramsey, Geoffrey N. Scott, David L. Smith, David J. Vatcher. *Photogrammetry:* Sydney B. Montgomery, *Paul R. T. Newby. [40]

FACULTY OF MEDICINE

Ph.D. *Pharmacology:* Harsadroy Desai. [1]

*Awarded a mark of distinction. †Also registered at another Institution.

APPENDIX XI

COLLEGE DIPLOMA AND CERTIFICATE AWARDS

1 OCTOBER 1973—30 SEPTEMBER 1974

FACULTY OF ARTS

Diploma in Film Studies: Beverley Anne Alcock; Yossi Balanescu Bal; Kevin John Glover; Paul William Hammond; Susan Caroline Mackie; Charles Maynard Preece; Jocelyn Enid Robson. [7]

Diploma in Library and Information Studies: Charlotte Atkinson; *Judith Marion Braunsberg; Catherine Elisabeth Chappell; Jacqueline Frances Cowan; Christine Anne Czechowski; Anne Catherine Eastwood; Richard John Arnold Finch; Susan Jane Fitchie; Norah Elizabeth Gatland; Susan Louise Goodman; Martin Christopher Graham; Haji Ibrahim Habsah; *Raymond Arthur Hubbard; Elizabeth James; Zainuddin Husein Rajo Lenggang; Brenda Gwendoline Leonard; Anthony Brian Lond; Malcolm Douglas McKee; Peter Columba McShane; Bernard John Mackey; Diana Campbell Macintyre; Paraskevas Hji Michael; Aileen Cecilia Moxon; John Majaliwa Newa; Aileen Ng Wai Koon; Alan Stanley Nipper; Mary Clare Nixon; Lynda Ann Parker; Oliver Stephen Pickering; Jean Irene Powell, William Mark Schupbach; Francesca Karen Sherwood; Linda Mary Simpson; Suzanne Mary Monica Smiddy; John Duncan Spiers; Peter Crowther Spofforth; Basil Clifford Hamilton Stevens; Sheila Mary Triggs; Gwynneth Mary Wilkey; David Michael Williams; Rosemary Ann Yarnold. [41]

Certificate of Proficiency in Phonetics: Janet Elizabeth Anderson; Judith Ashford; Hildergard Börgel; Jean Claude Brohan; Claudette Rosemary Camrass; Adriana Graciela Cánepa; Janet Mary Catell; Anita Pauline Conradi; Joseph-Edward De Miribel; Alain Georges Diana; Linda Margaret Drake; Antonio D'Eugenio; Golnaz Emami-Ahari; Susan Margaret Fitzgibbons; Signe Möller Forsberg; Anne Gwendoline Fraenkel; Annic Gestin; Leonard Albert Gibbons; Mary Margaret Haines; Nina Hajnal; Sheila Anne Hare; Joan Frances Holby; Gillian Horrocks; Kathryn Yvonne Jones; Axel Koberne; Pamela Esther Linwood; Gina Patricia Loughlin; Anni Métus; Etha Catharina Nichols; Parminder Singh Nindra; Penelope Jannette O'Callaghan; Susan Jean Evadne Peppé; Nanette Elaine Pilkington; Alison Pratt, Margaret Marie-Noëlle Réau; Liv Hedvig Schoyen Grue; Thérèse Jacqueline Scott; Gregory Sims; Jane Snell; Howard Grahame Tharp; Katsuaki Togo; Paradee Trivitayakun; Chantal Villien; Karen Elizabeth Waddell; Angela Mary Wilkes; John Hartley Williams; Edward Gordon Woods. [47]

Diploma in Urban Studies: Mayadunnage Dannie Culatilake Abhayaratna; Mathias Chinsonje Banda; *Rathikant Basu; Eberhard Bauer; Manosi Bhowmick; Prafulla Kumar Chakrabarti; Beatriz Elena Febras-Cordero de Perez; Reinoldo Augusto Patricio Iglesias Pino; Nihal Chand Jain; Swinder Kaur; Rudiger Friedrich Kramm; Salim Lakha; Wilkinson Sumnesh Kumar Phillips; †Palimar Panduranga Prabhu; Ahmed Ali Muhammed Rajab; Arun Narayan Sabnis; Raj Krishan Srivastava; Mbuywana Walusiku. [18]

*Awarded with Distinction. †Awarded with Merit.

FACULTY OF SCIENCE

Diploma in Conservation: Philip Leslie Armitage; Martin Stewart Brocklehurst; David Robert Bulford; Allan Terry Carr; Michael George Crafer; Edilberto Jose Ferrer Veliz; Richard John Keymer; John Graham Lamont; Peter Richard Marren; Stephanie Snowden Plackett; Bryan Handley Robert Thomas Rippey. [11]

Diploma in Hydrogeology: Abdul Wahab Assefi; Stephen Bennett; John Victor Goldhawk; Jubril Adisa Hanidu; John Andrew Hibbit; Michael Afeikhena Imosemi; Stephen Thomas Miller; Botlalo Motsete; Michael James O'Shea; Cesar Octavio Rodriguez; Said Ibrahim Yehya; Graham Claude Slessar; Syed Khalid Ali; Michael Wainwright. [14]

Diploma in Micropalaeontology: John Douglas Roberts; Graham Thomas Wright. [2]

Diploma in Space Science: Jeffrey Aspinall; Rodney Alan Buckland; John William Coleman; Peter Alan Rounce. [4]

Diploma in Statistics: Stephen Bigg; Michael John Clary; Antony Dimopoulos; *Graham John Parker; Nicholas Henry Skinner. [5]

FACULTY OF ENGINEERING

Diploma in Biochemical Engineering: David Robert Bewley; Desmond Michael McMahon Calnan; Christine Margaret Carley; Miranda Chua Gek Sim; David James Doyle; Arnaldo Garcia Y Peña; Stephen John Robert Halfacre; Michael David Housham; Joseph Andrew McKee; Ian Graham Lennox Maitland; Sangarapillai Sivapathasundaram; Stephen Wardle Smith; Geoffrey Donald Spriegel; Ambalavanar Thiruvathavoorar; Graham Laurence Wagner; Lyndon Lien-Sun Wou. [16]

Diploma in Chemical Engineering: Alasdair Charles Innes Heath. [1]

Diploma in Microwave Engineering: Demosthenes Asimacopoulos; Fouzi Ben-Khadra; Satish Madhao Bhide; Bimal Kumar Deka; Jimmy Fredoon Dholoo; Ravinder Kumar Dua; Youssef Kalatizadeh; Harris Makridis; Javad Sharifi; Richard Stanley Thompson; Lakshaman Mahinda Walpita. [11]

Diploma in Ocean Engineering: Michael Robert Bailey, William Coghill Banks; Trevor John Cook; Nicholas Spyridon Coronis; David Crichton; Brian Peter Gates; Ian Richard Kennett; Jeffrey Edward King; Alistair Rae McIntosh; Anthony Howard Monks; Adrian Needham; Mark Allan Oxley; Stephen Humphrey Lyn Parfitt; John Roger Ramsey; Evan George Hughes Rees; Geoffrey Norman Scott; David John Vatcher. [17]

Diploma in Naval Architecture: David Lewis Smith. [1]

Diploma in Photogrammetry: Graeme Douglas Birrell; John Edward Farrow; Stephen William Halifax Fullom; Adel Ahmed Youssef Haggag. [4]

Diploma in Surveying: Vincent James Campbell; Ian Michael Frostick; Graeme Harry Hollinshead; John Anthony Knight; Robert Alan Perry; Christopher Robert Rawlinson; Marcus Timothy Gurner Sherwood; Paul Timothy Parke Stoker. [8]

*Awarded with Distinction.

Diploma in Architecture: Antony Thyaqasiri Alwis; Kiruparajan Barr-Kumarakulasinghe; Allen Courtney Chapman; Angela Mary Celeno Clemo; Hartley Davies; Michael Harald Elkan; Anna Danuta Katarzyna Ennever; Nathaniel Thomas Whitby Gee; David Gardiner Gould; John Robert Irish; Peter Lewis Jeffree; George Patrick Campbell Keiller; Claire Kirby; Roger William Matthews Timothy O'Reilly Nash; Andrew David Neale; Francis Hugh Newton; William John Penny; Angus Renfrew Porter; Henry Denson Rolph; Keith David Sagar; Behzad Shahrouz-Tehrani; Kent Fitzgerald Spreckelmeyer; John William Turnbull; Vincent Antonio Wang; Thomas Leslie William. [26]

Diploma in Development Planning: Zein Elabdin Abd Wahab; Md. Nurul Alam; Mohammed Falah Jamal Al-Salman; Mochamed Saleh Amirudin; Suresh Amlani; Jaiandra Appalraju; Jesus Arroya Alejandre; Mohamed Heider Saleh Asaad; Tahir Asma; Paul Baross; Ahmed El Tigani Dafalla Barri; Ruth Susana Blum; Manickum Rungasamy Chetty; Beatriz Echeverri-Angarita; Maria Economaki; Alicia Eguiluz De Antuñano; Grace Obiageli Ejekam; Selim Sobhi Aly E-Faqih; Adam Ibrahim El Hag; Carlos Guillermo Gonzalez Espinosa; Sylvia Goyanna De Carvalho; Alvaro Graña Acuña; Nasr El Din Suliman Hassan; Mahmoud Mohammed Idris; Abdalla Ali Khalil; Ludwig Linden, Salem Muhamed Mahafda; Kamal El Din Mohd. Medani; Megat Adlan Megat Said; Sakharam Bhalchandra Mhapsekar; Juan Francisco Muñoz Rodriguez; Ananda Raj Pant; William Ramos Abdalla; Diego Alberto Restrepo Pelaez; Narin Sakulcalanuwut; Elihadiosman Salih Salih; Navin Fahirchand Shah; Mohammed Abdallah Shams El Din; Yousef Mahmoud Shedid; Mohammed Elhassan Shingrai; Jae Goo Song; Saroja Devi Suntheralingam; Sri-Urai Tantilipikara; Aduma Mba Aduma; Birol Yuksel. [45]

Certificate in Urban Development Planning: Au Pai Chuan; Tareq Mostafa Bushnaq; Gregory Chota Bwalya; Rupert Lile Carlton Daniel; Anwar-Ul-Islam Durrani; Akin Sadettin Eryoldas; Onwuha Cletus Ezeako; Tito Castro Firmalino; Rodolfo Jose Gimenez; Neville Harris De Silva Abeysinghe Gunaratna; Han Pao Teh; Agan Hariman, Syed Ali Hussain; Abdul Ghaffar Khan; Wahidur Rahman Khan; Lin Chiang-Tsai; Ernst Joseph August Lohman; Carlos Benjamin Luna Pena; Francis Njogu Mathenge; Rex Thomas Molyneaux; William Osafo-Buabeng; Duma Dance Phillime; Mohammed Rahimuddin; Alvin Earle Rattray; Leocade Allanson St. Helene; Calford Ivan Scott; Chandrakant Bhailal Shah; Ian Cilanzi Beattie Sikazwe; Juan Antonio Solá; Kyaw Thein; Tin U. [31]

APPENDIX XII

SCHOLARSHIPS, STUDENTSHIPS, AND PRIZES
COLLEGE AND UNIVERSITY AWARDS

COLLEGE AWARDS

Charlotte Ashby Prize (*Laws*)—H. B. Clark.

Herbert Batsford Prize (*Architecture*)—G. Ryding.

Thomas Witherden Batt Scholarships (*Science*)—Jennifer De Vriendt, S. B. Neoh, Susan E. Gardiner, Yvonne Bosworth, Valerie Greenall.

Leonard Bayliss Memorial Prize (*Physiology*)—P. R. Weekes.

Francis Perch Bedford Prize (*Zoology*)—J. Tite.

Bonney Prize (*Geology*)—A. C. Spencer.

Brodrick-Parry Prize (*Geography*)—Helen M. Cooke.

Margaret Browne Studentship (*Zoology*)—D. E. Pacey.

Chadwick Medal and Prize (*Civil Engineering*)—D. Taylor.

Churchill-Jenkinson Prize (*Archive Studies*)—P. Emmerson.

Antonio Cippico Medal and Prize (*Italian*)—Mary C. T. Coope.

Lilian Clarke Prize (*Botany*)—Jill Shaw.

Clinton Prize (*Electrical Engineering*)—D. L. Harrison.

Cowley Prizes (*Library and Information Studies*)—A. J. Flavell, M. B. Stevenson.

Dawes Hicks Postgraduate Scholarships in Philosophy—G. A. Curtis.

Derby Scholarship (*Zoology*)—M. C. P. Marsh.

Donaldson Medal (*Architecture*)—M. E. Lewis.

Early English Text Society's Prize—D. S. Maddicott.

Esso Chemical Travelling Scholarship (*Chemical Engineering*)—K. Galbakiotis.

Richard FitzGerald Prize (*Engineering*)—A. K. Booer.

Sir Banister Fletcher Prize and Medal (*Architecture*)—D. Gould.

Foreign Students Scholarship in Arts—Catherine Baudino, Christine Pillot-Favard, scholarship equally divided.

Stephen Glanville Memorial Scholarship (*Egyptology*)—A. El-Khouli.

Edith Goodyear Prize (*Geology*)—Sarah J. Glendining.

Eva Grunwald Memorial Prize (*French*)—C. J. Bates.

Paul Haas Studentship (*Science*)—Susan F. Koval.

Violet Hall Prize (*French*)—Christine Robinson, Fortunee Gholam, Sandra Adam, prize equally divided.

Hart Prizes (*Photogrammetry and Surveying*)—J. E. Farrow, C. R. Rawlinson.

Heimann Medal (*German*)—Ursula Riniker.

Elsie Hitchcock Prize (*English*)—Charlotte Brunsdon.

Hollier Scholarships in Greek—N. Bozanic, Georgia Karamanos.

Hotine Exhibition (*Photogrammetry and Surveying*)—R. A. Perry.

R. B. Hounsfield Prize in Traffic Engineering—D. Taylor

R. B. Hounsfield Scholarship in Traffic Engineering—P. Rice.

R. B. Hounsfield Prize in Town Planning and Civic Engineering—Corinne J. Swain.

Joseph Hume Scholarship in Law—Jane E. Dodgson.

Huntingdon Research Centre Prize (*Histology Part I—Medical Sciences*)—M. E. Mead.

Hurst Prize in English Law—Ann L. Glaves-Smith, K. G. Stella, prize equally divided.

Institution of Civil Engineers' Prize—D. A. Andreou.

Institution of Electrical Engineers' Prize—C. P. Norton.

Institution of Mechanical Engineers' Prize—S. H. Boreham.

Sir Hilary Jenkinson Scholarship in Archive Studies—Ruth F. Vyse, A. E. Readman.

Ker Memorial Prize (*English*)—S. Bamlett.

Kitson Prize (*Chemical Engineering*)—P. G. Marden.

Dr R. Kohn Prize (*Physiology Part I—Medical Sciences*)—Virginia J. Leggatt.

Librarianship and Archives Exhibitions—Susan J. Fitchie, Norah E. Gatland.

Lloyd Scholarship in Modern Greek—P. Naiditch.

Sir John MacAlister Medal (*Librarianship*)—Judith M. Braunsberg.

Malden Scholarship (*Greek*)—G. C. Woodbridge.

Maxwell Law Prize—Christina Harrison.

Medical Postgraduate Scholarship—Susan F. Koval.

Merck Sharp and Dohme Ltd Prizes (*Biochemistry Part I—Medical Sciences*)—C. J. Bignell; (*Genetics Part II—Medical Sciences*)—A. S. Luder.

Sir William Meyer Essay Prizes (*Geography*)—M. P. Tight, S. W. Skinner.

Sir William Meyer Prize (*Geography*)—Diana Liverman.

Sir William Meyer Prize (*History*)—P. J. Morgan.

Sir William Meyer Travelling Studentships (*History*)—Trudi A. Hitchin, Stephanie A. Duffell, Elizabeth M. Dennett, Frances C. Albert, Sian C. Thomas, D. J. Clarke, M. M. Chrimes, A. P. Fowle, E. H. Arnold, J. F. Lock.

John Stuart Mill Scholarship in Philosophy of Mind and Logic—G. A. Curtis.

Momber Scholarship in Geology—P. Bishop.

Momber Scholarship in Physics—T. R. Twomei.

Momber Scholarship in Science—Susan F. Koval.

Rosa Morison Postgraduate Scholarship in Arts—M. H. Peake.

Rosa Morison Scholarship in English Language and Literature—Deborah A. Cherry.

Morley Medal (*Modern English Literature*)—Diane C. MacDonell.

Morris Prize (*Geology*)—P. J. Shaw.

Ramsay Memorial Medal (*Chemistry*)—J. W. Bevan.

Graham Robertson Travelling Scholarship (*Fine Art*)—Sharon M. Morris.

L. M. Rothschild Scholarship in French—Sandra Adam.

Schafer Prize in Physiology—D. G. Allen.

Sharpey Physiological Scholarship—M. Kretzschmar.

Slade Scholarships—P. Winder, Anne Ross.

Hugh Smith Memorial Prize (*English*)—M. Anthony.

Smith Kline and French Laboratories Ltd Prize (*Anatomy Part I—Medical Sciences*)—M. G. Mead.

Stevenson Prize (*Applied Mathematics*)—M. A. Baxter.

Sir Andrew Taylor Prize in Architecture—W. Penny.

Troughton Scholarship—P. R. Weeks.

Tuffnell Scholarships (*Chemistry*)—P. C. Turtle, G. P. Harper.

A. J. V. Underwood Exhibition (*Chemical Engineering*)—T. P. Elson.

L. F. Vernon-Harcourt Prize (*Civil Engineering*)—L. C. F. Lam Tin Cheung.

Ellen Watson Memorial Scholarship in Applied Mathematics—P. J. Budden, Arpita Datta, scholarship equally divided.

Dr T. D. Whittet Prize (*Pharmacology Part II—Medical Sciences*)—A. T. Wilson.

FACULTY MEDALS AND PRIZES

Laws: Andrews Medal and Prize—Helen M. Mattson.

Science Medal and Prize—R. B. Foster.

Engineering: Goldsmid Medal and Prize—L. C. F. Lam Tin Cheung.

Medical Sciences Medal and Prize—M. Koblic.

Environmental Studies Medal and Prize—S. H. Child.

SESSIONAL PRIZES

Anthropology: Rosa Morison Prize—Ayse N. Sirman.

English: Campbell Clarke Scholarships—(1) Jane Clarke, Linda R. Beck, prize equally divided. (2) C. J. Kirkham, Penelope S. Clark, prize equally divided. *West Scholarship*—S. D. Bamlett, S. P. Ellis, prize equally divided.

French: Rosa Morison Prizes—(1) Christine S. Purdy. (2) Jane Snell. (3) Sharon D. Webb.

Geography: College Prize—C. J. Thompson. *Maconochie Prize*—P. Knott *1903 Prize*—Susan T. Greenblatt, Carolyn R. Knight, prize equally divided.

German: Robertson Prize—Diane E. Sherlock. *Willoughby Prize*—M. A. Kakabadse.

History: Dolley Prize—A. J. Gross, J. V. Wood, prize equally divided. *Pollard Prize*—J. E. Woods. *West Prize*—Trudi A. Hitchin.

Italian: Sir Anthony Panizzi Prize—Janet M. Cattell, Susannah J. Ellis, prize equally divided.

Philosophy: Dawes Hicks Scholarship—Caroline Dutting.

Political Economy: Hume-Lloyd Scholarships—(1) Patricia A. Sullivan, Brenda Holman, prize equally divided. (2) D. R. Cracknell, M. J. Beswick, prize equally divided. (3) N. R. Shaw, D. B. Winslade, prize equally divided.

Scandinavian Studies: Rosa Morison Prize—Mary Smyth.

Laws: Andrews Prizes—(1) K. G. Stella. (2) Ann L. Glaves-Smith. (3) Veronica M. Schoeneich. (4) J. V. Murphy. (5) H. B. Clark.

Architecture: Bartlett Prizes—(1) W. P. N. Bates. (2) Alice E. Poole.

Astronomy: Huggins Prize—J. R. Giddings, G. E. Parkes, prize equally divided.

Biochemistry: Jack Drummond Prize—M. W. Cunningham. *Plimmer Prize*—A. N. Lane.

Botany: Darwin Prize—Melinda Sturges. *Robert Hooke Prize*—Helen Watts.

Chemistry: C. K. Ingold Prizes—(1) I. P. Rothwell. (2) D. R. Grist. (3) R. Gosling.

Geology: Chubb Prize—A. M. Boast.

Mathematics: Filon Prize—R. A. Rigby, R. H. K. Thomas, prize equally divided. *Hill Prize*—R. H. K. Thomas, A. D. Hodgetts, prize equally divided. *Jeffery Prize*—S. J. Avis, M. A. Baxter, M. S. Sharif, prize equally divided.

Physics: William Bragg Prize—R. J. Thorley. *Oliver Lodge Prize*—C. J. Blundell. *Wood Prize*—R. L. Davies.

Physiology: Foster Prize—M. R. Jarmulowicz. *Sanderson Prize*—M. G. Hibberd.

Psychology: McDougall Prize—A. G. R. McClelland. *Spearman Prize*—Hazel A. Seidel.

Statistics: Egon Pearson Prize—W. Elmore. *Karl Pearson Prize*—L. A. Baxter, Elizabeth M. Rumbold, prize equally divided.

Zoology: (1) Sheila Vince. (2) R. Rowland.

Chemical Engineering: Goldsmid Prizes—(1) B. Jazayeri. (2) I. C. Lomas.

Civil and Municipal Engineering: Goldsmid Prizes—(1) M. Templeton. (2) Wee Hian Wen.

Electronic and Electrical Engineering: Goldsmid Prizes—(1) M. C. Bone. (2) A. K. Booer.

Mechanical Engineering: Goldsmid Prizes—(1) Van Griethuysen. (2) J. R. Hood.

Medical Courses, Part I Examination: ICI Prize in Anatomy—P. E. Silkoff. *Drummond Prize in Biochemistry*—Virginia J. Leggatt. *ICI Prize in Physiology*—G. M. Gammon. *Glaxo Prize for Best Aggregate Performance*—Virginia J. Leggatt.

Medical Courses, Part II Examination: Drummond Prize in Biochemistry—A. S. Luder. *Cluff Prize in Physiology*—A. S. Luder. *Wellcome Prize in Human Biology.*—A. S. Luder. *Cuxson Gerrard Prize in Pharmacology*—A. S. Luder. *Elgar Prize in General Pathology*—A. T. Wilson. *Suckling Prize in Neurosciences and Behavioural Sciences*—A. P. Corder. *Wyeth Prize for Best Aggregate Performance*—A. S. Luder.

Dental Courses, 2nd Examination in Dental Surgery: Anatomy Prize—G. Hamill, I. A. MacDonald, prize equally divided. *Physiology Prize*—Margaret A. Guy.

UNIVERSITY AWARDS

UNIVERSITY POSTGRADUATE (FINALS) STUDENTSHIPS

Civil Engineering: L. C. F. Lam Tin Cheung, C. P. Ellinas (2nd year). *Psycholinguistics:* R. S. Kirby (2nd year).

UNIVERSITY POSTGRADUATE STUDENTSHIPS

Ancient History: Alexandrina J. Smith (William Lincoln Shelley Studentship). *Botany and Microbiology:* Patricia C. Anderson (Scharlieb Studentship), Cheryl E. J. Wallis (D. T. Gwynne-Vaughan Studentship). *Civil Engineering:* M. Bayer (2nd year). *Egyptology:* A. J. L. Smith. *French:* Catherine A. Baudino, D. Macey, J. Madden. *German:* L. McAllister. *History:* G. C. Wigglesworth. *Mechanical Engineering:* K. S. Sieh (3rd year). *Philosophy:* W. L. Marshall (3rd year), Freya Mathews (3rd year).

APPENDIX XIII

BENEFACTIONS, DONATIONS, RESEARCH GRANTS AND CONTRACTS

The College Committee makes grateful acknowledgment of the following:

ADVISORY SERVICES (CLINICAL AND GENERAL) LIMITED

£10 for the Faculty of Medical Sciences for a Sessional Prize (Part I—Physiology, second prize) to be known as the 'Dr. R Kohn Prize'.

AGRICULTURAL RESEARCH COUNCIL

£7,543 for research in the Department of Botany and Microbiology on the resistance and susceptibility of wheat to rust fungi.

ALLEN AND HANBURYS RESEARCH LIMITED

£600 for the Department of Pharmacology in support of research on drug allergy.

AMERICAN CHEMICAL SOCIETY

$12,000 for research in the Department of Chemistry on the organometallic syntheses of seven-membered rings.

ARCHITECTS' REGISTRATION COUNCIL OF THE UNITED KINGDOM

£935 for the School of Environmental Studies for a follow up study of ex-students of architecture in the British Isles and an examination of their employment pattern.

THE ARTHRITIS AND RHEUMATISM COUNCIL

£3,603 for research in the Department of Physiology on naturally occurring anti-inflammatory agents.

THE TRUSTEES OF MAJOR C. J. P. BALL'S SETTLEMENT

A benefaction, to be used at the discretion of the College, of £25,000 (£45,454 with recovery of income tax paid), which the College decided to apply towards the capital costs of Wates House, a new building for the School of Environmental Studies. [Major Ball was a Fellow of the College and a Past President of the Association of Friends of University College London. He died on 15 October 1973.]

EMERITUS PROFESSOR H. HALE BELLOT (THE LATE)

A further sum of £684.19, under the bequest of the late Professor Bellot, which is being used for the benefit of the American History library and to assist graduate students and younger members of the staff of the History Department to pursue research in the United States or in any other part of the western hemisphere.

BOEHRINGER MANNHEIR GMBH

£900 for the Department of Pharmacology in support of research in drug allergy.

C. H. BOEHRINGER SOHN

£2,633 for the Department of Pharmacology in support of research in drug allergy.

THE BRITISH ACADEMY

£4,000 for 1973–74 towards the cost of the production of a definitive edition of the works of Jeremy Bentham.

BRITISH HEART FOUNDATION

£3,142 for research in the Department of Physiology on the effects of instropic interventions on cardiac muscle.

THE BRITISH MUSEUM, TRUSTEES OF

A gift, through the good offices of the Trustees of the British Museum, of four important Roman inscriptions from the collection of Lord Kinnaird.

THE BRITISH OXYGEN COMPANY LIMITED

£3,000 for the Department of Mechanical Engineering in support of a lectureship in biomedical engineering.

BRITISH RAILWAYS BOARD

£900 for research in the Department of Electronic and Electrical Engineering on surface acoustic wave technology.

BRITISH SOCIETY FOR RESEARCH ON AGEING

£1,443 for the Department of Anatomy and Embryology in support of experimental gerontology.

CALOUSTE GULBENKIAN FOUNDATION, LISBON

(1) £110 for the Department of Electronic and Electrical Engineering towards the cost of the construction of a reading machine.

(2) £235 for the Department of English Language and Literature in support of a Survey of English Usage.

CANCER RESEARCH CAMPAIGN

(1) £8,983 and £192 for research in the Department of Anatomy and Embryology on the *in vitro* determination and differentiation of SIKR.

(2) £12,283 for research in the Department of Biochemistry on the effects of aflatoxins and other carcinogens on membrane polysome interactions, *in vivo* and *in vitro*.

(3) £3,000 and £159 for research in the Department of Botany and Microbiology on nucleic acid metabolism in mitochondria.

(4) £2,897 and £194 for a study in the Department of Human Genetics and Biometry of the effect of chemicals on mitotic cycle times and rates of cell proliferation.

(5) £5,430 for research in the Department of Pharmacology on tumour immunology.

CENTRE FOR ENVIRONMENTAL STUDIES

(1) £13,425 for a study in the School of Environmental Studies of the absorption of newcomers in a Latin American new town, Ciudad Guayana, Venezuela.

(2) £952 for the School of Environmental Studies for a study of the inter-war suburbs.

CIVIL SERVICE DEPARTMENT

£28,000 for a study in the School of Environmental Studies of the methods for planning telecommunications facilities.

CONSTRUCTORS JOHN BROWN LIMITED AND OTHERS

Donations totalling £1,870.25 to the Mark Guter Memorial Fund established in memory of the late Professor Mark Guter, Professor of Chemical Engineering, 1971–72 (£1,250 from Constructors John Brown Ltd, £264.40 from his friends and colleagues in the CJB Group of companies, and £356.85 from other donors). The fund will be used for the benefit of the Library. [This corrects the entry in the Report for 1972–73, p. 145.]

CUXSON, GERRARD AND COMPANY LIMITED

£42.85 per annum for seven years for the Faculty of Medical Sciences for a Sessional Prize (Part II—Pharmacology) to be known as the 'Cuxson Gerrard Prize'.

CYSTIC FIBROSIS RESEARCH TRUST

£1,800 and £105 for an investigation in the Department of Physiology of the salivary micro-circulation, macromolecular exchange and cystic fibrosis using model systems in animals.

DE BEERS INDUSTRIAL DIAMOND DIVISION LIMITED

£1,000 for research in the Department of Chemistry on diamonds.

DEPARTMENT OF EDUCATION AND SCIENCE

(1) £2,567 and £1,061 for the School of Environmental Studies in support of the Oxford Polytechnic timetabling and briefing study.

(2) £2,000 for the School of Library, Archive, and Information Studies in support of the special advanced course for Teacher/Librarians.

(3) £12,300 for the Department of Statistics and Computer Science for the provision and evaluation of access to MEDLINE on the ARPA Network.

DEPARTMENT OF THE ENVIRONMENT

(1) £32,095 for a study in the Department of Civil and Municipal Engineering of the physical processes associated with the entrainment and suspension of solids in turbulent velocity fields.

(2) £15,104 for the Department of Civil and Municipal Engineering for a study of the movements of cars and their occupants in accidents.

(3) £14,670 for a study in the Department of Civil and Municipal Engineering of the effect of ageing on driver awareness of traffic hazards.

(4) £5,669 for a study in the Department of Civil and Municipal Engineering of the loss of control and the relation between accident rates and handling characteristics of cars.

(5) £3,601 for a study in the Department of Civil and Municipal Engineering of the effect of knee impact area design on road accident injuries.

(6) £435 for the Department of Civil and Municipal Engineering for a study of the second Stevenage bus demonstration project.

(7) £1,233 for research in the School of Environmental Studies on economic and operational aspects of the building process.

DEPARTMENT OF THE ENVIRONMENT
(TRANSPORT AND ROAD RESEARCH LABORATORY)

(1) £16,764 for a study in the Department of Civil and Municipal Engineering of relationships between numbers of road accidents and volumes of road traffic.

(2) £7,600 for research in the Department of Electronic and Electrical Engineering on two-frequency primary radar with passive transponders for vehicle headway measurements.

DEPARTMENT OF HEALTH AND SOCIAL SECURITY

£9,028 for the Department of Mechanical Engineering for the development of a prototype hydraulically-powered arm.

DEPARTMENT OF TRADE AND INDUSTRY

£8,659 for research in the Department of Mechanical Engineering on yaw and roll control of surface ships.

DEPARTMENT OF TRADE AND INDUSTRY
(NATIONAL PHYSICAL LABORATORY)

£4,750 for the Department of Statistics and Computer Science for the use of ARPA network services.

DISTA PRODUCTS LIMITED

£1,600 for the Department of Pharmacology in support of pharmacokinetic studies of D-pencillamine.

ESSO PETROLEUM COMPANY LIMITED

£900 for a research studentship in the Department of Chemical Engineering.

FOUNDATIONS' FUND FOR RESEARCH IN PSYCHIATRY (U.S.A.)

(1) $4,100 for a research fellowship in the Department of Anatomy and Embryology.

(2) $15,000 for a research fellowship in the Departments of Human Genetics and Biometry and the Department of Psychology.

GEIGY PHARMACEUTICALS

£480 in support of a research assistantship in the Department of Botany and Microbiology.

GENERAL ELECTRIC COMPANY

£2,000 for research in the School of Environmental Studies on communications systems.

GLAXO LABORATORIES LIMITED

(1) £1,000 and £1,000 for the Department of Pharmacology in support of research on drug allergy.

(2) £50 per annum for three years for the Faculty of Medical Sciences for a Sessional Prize (Part I—best aggregate performance) to be known as the 'Glaxo Prize'.

GREATER LONDON COUNCIL

£500 for the Department of Civil and Municipal Engineering for research in traffic studies.

HOULDER BROTHERS AND COMPANY LIMITED

£750 for research in the Department of Mechanical Engineering on dynamic positioning of ships.

HUNTINGDON RESEARCH CENTRE

£10 for the Faculty of Medical Sciences for a Sessional Prize (Part I—Histology) to be known as the 'Huntingdon Prize'.

IMPERIAL CHEMICAL INDUSTRIES LIMITED

£60 per annum for three years for the Faculty of Medical Sciences for Sessional Prizes (Part I—Anatomy and Physiology) to be known as the 'I.C.I. Prizes'.

THE INSTITUTION OF CIVIL ENGINEERS

Provision for the Institution of Civil Engineers Prize of £10 to be awarded each session, instead of in alternate sessions as previously arranged (see Annual Report 1971–72).

DR L. MARGARET KERLY

£750 to establish, within the Faculty of Medical Sciences, Sessional Prizes (Parts I and II—Biochemistry) to be known as the 'Drummond Prizes'.

LORD KINNAIRD, *see* 'The British Museum', p. 143.

THE LEVERHULME TRUST FUND

(1) £16,000 and £235 for the Department of English Language and Literature in support of a Survey of English Usage.

(2) £18,000 for the School of Environmental Studies for an evaluation of complex buildings with special reference to hospitals.

(3) £4,250 for the School of Environmental Studies in support of two lectureships in overseas development planning.

(4) £2,000 for an emeritus fellowship in the Department of German.

MARSHALL AID COMMEMORATION COMMISSION

Research training support grants totalling £230.

MAURICE LUBBOCK MEMORIAL FUND

£1,000 for the Department of Psychology for an analysis and documentation of TIS scores.

MAY AND BAKER LIMITED

£1,850 for the Department of Pharmacology in support of research in drug allergy.

MEDICAL RESEARCH COUNCIL

(1) £61,968 for the Department of Anatomy and Embryology for an analysis of sensory signals in the central nervous system.

(2) £45,253 for the Department of Anatomy and Embryology for combined ultrastructural and experimental studies on central and peripheral nervous tissues.

(3) £13,310 for a study in the Department of Anatomy and Embryology of the effects of fornix lesions in monkeys on recognition memory, short term memory, and association memory.

(4) £12,198 for studies in the Department of Anatomy and Embryology of certain aspects of enamel structure and cavity preparation technology.

(5) £1,836 for a study in the Department of Anatomy and Embryology of structure and function of coated and plain synaptic vesicles in the CNS.

(6) £264 for research in the Department of Anatomy and Embryology on the immunohistochemistry of synapses in the mammalian central nervous system during post-natal development.

(7) £5,224 and £2,745 for the Department of Biochemistry for studies of second high molecular weight mammalian DNA polymerase and on its role in replication.

(8) £146,133 for research in the Department of Biophysics on mechanics of synaptic function.

(9) £6,831 for research in the Department of Chemistry on the structure and packing of membrane components.

(10) £3,590 and £2,769 for research in the Department of Chemistry on the conformation of molecules affecting nervous systems.

(11) £1,672 for the Department of Chemistry and University College Hospital Medical School for studies of pathological-type crystals.

(12) £11,941 for studies in the Department of Human Genetics and Biometry of the inherited disorders of sulphur aminoacid metabolism using cultured cells.

(13) £11,836 for research in the Department of Pharmacology on the role of calcium in the secretion of histamine from mast cells.

(14) £10,278 for a study in the Department of Pharmacology of the effects of histamine H_2 receptor antagonists on micro-circulation.

(15) £4,628 for research in the Department of Pharmacology on the social influences of drug dependence in rodents.

(16) £3,691 for a study in the Department of Pharmacology of a cytopherometer test for specific tumour antigen using chemical materials.

(17) £3,396 and £484 for the Department of Pharmacology for the purchase of a spectrophotometer.

(18) £4,002 for research in the Department of Pharmacology and the Department of Anatomy and Embryology on distribution and significance of dopamine and 5-hydroxytryptamine and their metabolites.

(19) £13,378 for the Department of Physiology for chemical and calorimetric studies of the energetics of muscular contraction.

(20) £6,200 for studies in the Department of Physiology of the blood-brain barrier.

(21) £5,707 for the Department of Physiology for an investigation into the causes of intraventricular haemorrhage in the newborn.

(22) £3,720 for the Department of Physiology for an investigation of descending spinal pathway controlling muscle spindles and the stretch reflex.

(23) £1,203 for an investigation in the Department of Physiology into the properties and mechanisms of persistent changes in cerebral cortical electrical activity.

(24) £1,102 for the Department of Physiology towards the cost of apparatus for the study of synaptic facilitation in the dentate area of the hippocampal formation.

(25) £1,012 for research in the Department of Physiology and the Department of Pharmacology on neurophysiological correlates of psychological processes and their modification by drugs.

(26) £461 for research in the Department of Physiology and St Thomas's Hospital Medical School on the placental transport of electrolytes.

(27) £1,048 for the Department of Psychology for on-line computer facilities for psychological research.

(28) £1,400 for the Student Health Association for research on the personality factors relating to study difficulty in higher education.

(29) £28,800, £4,391, £2,611, £820, and £34 for research in the Department of Zoology and Comparative Anatomy on the immunology of the nervous system.

(30) £1,350 for the Department of Zoology and Comparative Anatomy and Chelsea College of Advanced Technology for an automated measurement of tissue changes in ageing.

(31) Research training support grants totalling £12,650.

MEDICAL RESEARCH COUNCIL (CANADA)

$500 for a fellowship supply allowance in the Department of Zoology and Comparative Anatomy.

MENTAL HEALTH TRUST AND RESEARCH FUND

£600 for a study in the Department of Zoology and Comparative Anatomy of cell surface antigenic markers in the nervous system.

MERCK SHARP AND DOHME LIMITED

£20 for the Faculty of Medical Sciences for Sessional Prizes (Part I—Biochemistry, second prize; Part II—Genetics) to be known as the 'Merck Sharp and Dohme Prizes'.

THE METALS SOCIETY

£414 for the Department of Electronic and Electrical Engineering in support of the Andrew Carnegie research scholarship.

THE METEOROLOGICAL OFFICE

£948 for the Department of Physics and Astronomy for research on the upper atmosphere.

METROPOLITAN WATER BOARD

£110 for the Department of Civil and Municipal Engineering for filtration experiments at Kempton Park.

MINISTRY OF DEFENCE (PROCUREMENT EXECUTIVE)

(1) £1,920 for research in the Department of Civil and Municipal Engineering on international design formulae for stress analysis of lightweight military structures.

(2) £9,646 for an investigation in the Department of Electronic and Electrical Engineering on interpolation locking for beam-steered active arrays.

(3) £4,246 for a study in the Department of Electronic and Electrical Engineering of the noise properties of high power avalanche diode.

(4) £3,594 and £2,446 for research in the Department of Electronic and Electrical Engineering on null steering antennas.

(5) £3,576 for the Department of Electronic and Electrical Engineering for a feasibility study of acousto-optic display devices.

(6) £1,904 and £68 for research in the Department of Electronic and Electrical Engineering on whip antennas.

(7) £400 for research in the Department of Electronic and Electrical Engineering on electromagnetic levitation of liquid metals.

(8) £460 for the Department of Geology to measure young modulus and compressibility on rock samples.

(9) £15,610 for research in the Department of Mechanical Engineering on control systems for submersible vehicles.

(10) £2,020 for research in the Department of Phonetics and Linguistics on the differences between individual listeners in their ability to perceive sound differences.

(11) £291 for research in the Department of Photogrammetry and Surveying into the industrial use of photogrammetry as an aid to measurement of complex shapes.

(12) £5,444, £2,514, and £355 for the Department of Statistics and Computer Science for semiconductor device computer studies.

(13) £5,000 for the Department of Statistics and Computer Science for use of ARPA network services.

MUSCULAR DYSTROPHY ASSOCIATIONS OF AMERICA INC.

(1) $13,500 for a postdoctoral fellowship in the Department of Physiology.

(2) $1,000 for a fellowship supply allowance in the Department of Physiology.

NATIONAL COAL BOARD

(1) £4,125 for research in the Department of Chemical Engineering on the behaviour of coal particles in a fluidised bed of inert refractory material.

(2) £1,700 for the Department of Electronic and Electrical Engineering for a feasibility study related to seismic modelling techniques.

NATIONAL COUNCIL FOR EDUCATIONAL TECHNOLOGY

(1) £12,500 for the Department of Electronic and Electrical Engineering, Imperial College, and Queen Mary College, for computer assisted learning in engineering science.

(2) £20,970 for the Departments of Physics and Astronomy, Chemistry, and Physiology, for a study of computers in the undergraduate science curriculum.

THE NATIONAL PORTRAITURE ASSOCIATION

£150 per annum, for five years, to provide a prize for a student of the Slade School of Fine Art, to be known as the 'Rodney Burn Prize'. [Mr Rodney Burn is a Fellow of the College.]

NATURAL ENVIRONMENT RESEARCH COUNCIL

(1) £2,400 for research in the Department of Botany and Microbiology into the ecological effects of recreation on ecosystems.

(2) £16,794 for the Department of Geology for high pressure and temperature rheological experiments on geological materials important in tectonics.

(3) £1,390 for a study in the Department of Physics and Astronomy of NASA Mariner 10 Data from the planet Mercury.

(4) Research training support grants totalling £2,658.

NORTH ATLANTIC TREATY ORGANISATION

£1,532 for the Department of Electronic and Electrical Engineering for the development of 8 mm. microwave refractometer sampling cavity.

THE NUFFIELD FOUNDATION

(1) £1,030 for a study in the Department of Anthropology of regional origin and urban class in Nigeria.

(2) £36,676 and £1,177 for the School of Environmental Studies in support of an extension service for the benefit of university schools of architecture, planning and urban administration in developing countries.

OVERSEAS DEVELOPMENT ADMINISTRATION

£663 for the School of Environmental Studies for research on fringe service industries in Chandigarh, India.

THE PAUL INSTRUMENT FUND COMMITTEE

(1) £8,000 for an investigation in the Department of Chemistry of transient gas-phase species.

(2) £1,839 for research in the Department of Electronic and Electrical Engineering on a new technique for wide-band precision impedance bridge.

(3) £1,317 for the Department of Electronic and Electrical Engineering for the construction of a microwave radio refractometer.

PHARMACIA (G.B.) LIMITED

£220 for the Department of Pharmacology in support of research on drug allergy.

POST OFFICE CONTRACTS DIVISION

(1) £7,523 for the Department of Electronic and Electrical Engineering for semiconductor device computer experiments.

(2) £54,773 for a study in the School of Environmental Studies of the effectiveness and impact of future systems of person to person telecommunications and a programme of statistical studies of communications patterns.

(3) £5,170 for the School of Environmental Studies for fieldwork for office communications survey.

THE ROYAL COLLEGE OF PHYSICIANS

£6,582 for research in the Department of Statistics and Computer Science on statistical analyses.

THE ROYAL SOCIETY

(1) £7,500 for an investigation in the Department of Botany and Microbiology of bound electron transport proteins in photo-synthetic membranes.

(2) £70,640 for a Royal Society Research Professorship and expenses in the Department of Chemistry.

(3) £8,405 for a scientific information research fellowship in the School of Library, Archive, and Information Studies.

RUSTENBURG PLATINUM MINES LIMITED

£11,161 for research in the Department of Chemistry on new platinum complexes.

THE ROBERT AND LISA SAINSBURY CHARITABLE FUND

£260 for the Slade School of Fine Art for the benefit of young sculptors.

SCIENCE RESEARCH COUNCIL

(1) £20,708 for a study in the Department of Anatomy and Embryology on the organisation of the visual cortical areas in the rhesus monkey.

(2) £12,862 for research in the Department of Biochemistry on mechanism of enzyme action as approached by determination of spectra of intermediates.

(3) £9,346 for studies in the Department of Biochemistry of mutant enzymes from pseudomonas aeruginosa.

(4) £89,128 for a study in the Department of Chemical Engineering of the technology of lipophilic enzymes.

(5) £12,000 for the Department of Chemistry for electron spin resonance studies of free radicals.

(6) £11,318 for research in the Department of Chemistry on the synthesis of large-ring conjugated systems.

(7) £7,551 for research in the Department of Chemistry on the synthesis of sesquiterpenes.

(8) £6,355 for research in the Department of Chemistry on electrogeneration of transient organometallic radicals for ESR spectrometry.

(9) £5,966 for research in the Department of Chemistry on resonance Raman spectroscopy.

(10) £5,966 for research in the Department of Chemistry on enzyme mimetic reactions in organic synthesis.

(11) £5,966 for research in the Department of Chemistry on the role of cation radicals in the nitration of aromatic amines.

(12) £5,659 for research in the Department of Chemistry on oxidatively induced reactions of 6-bonded organometallic compounds.

(13) £1,038 for a senior visiting fellowship in the Department of Chemistry.

(14) £9,235 for the Department of Civil and Municipal Engineering for a comparison of digital and analogue methods of assigning traffic to a road network.

(15) £8,117 for research in the Department of Civil and Municipal Engineering on the filter flocculation in water treatment.

(16) £3,233 for a senior visiting fellowship in the Department of Civil and Municipal Engineering.

(17) £2,060 and £1,116 for the Department of Civil and Municipal Engineering for field studies of flow characteristics in relation to sediment transport and flow resistance.

(18) £12,395 for the Department of Electronic and Electrical Engineering for microwave research.

(19) £7,257 for an investigation in the Department of Electronic and Electrical Engineering on electric motors with high specific outputs from 1w.–500w.

(20) £4,387 for the Department of Electronic and Electrical Engineering for surface crack detection using acousto-optic techniques.

(21) £2,720 for a study in the Department of Electronic and Electrical Engineering of integrated optical waveguides and waveguide components.

(22) £2,700 for research in the Department of Electronic and Electrical Engineering on implanted thin films for optical devices.

(23) £1,425 for a study in the Department of Electronic and Electrical Engineering of a phase modulator for optical fibres.

(24) £560 for research in the Department of Electronic and Electrical Engineering on electromagnetic levitation of liquid metal: investigation by analogue technique.

(25) £5,000 and £463 for the School of Environmental Studies for a study of the building process: the mechanism of response to effective demand.

(26) £3,182 for a study in the School of Environmental Studies of the use of space and facilities by complex organisations.

(27) £3,695 for the Department of Mathematics for accurate numerical calculations of viscous flow past thin bodies.

(28) £274,634 for the Department of Physics and Astronomy for geophysical and astronomical research in Space.

(29) £50,288 for research in the Department of Physics and Astronomy on balloon-borne instrumentation for ultra-violet and infra-red astronomy.

(30) £43,080 for the Department of Physics and Astronomy and Queen's University Belfast for a collaborative programme of high resolution ultra-violet astronomy.

(31) £36,630 for the Department of Physics and Astronomy for Bubble Chamber film analysis 1974–75.

(32) £36,403 for the Department of Physics and Astronomy for high resolution ultra-violet interstellar and stellar observations from a balloon platform.

(33) £35,134 and £2,660 for the Department of Physics and Astronomy for a balloon programme of infra-red astronomy.

(34) £20,532 for the Department of Physics and Astronomy for geophysical and astronomical researches in Space.

(35) £12,052 for the Department of Physics and Astronomy in support of participation in IUE Project.

(36) £11,481 for a study in the Department of Physics and Astronomy of metastable atom collisions in gases.

(37) £11,050 for research in the Department of Physics and Astronomy on inelastic ionic collisions.

(38) £10,515 for research in the Department of Physics and Astronomy on scattering of low energy positrons.

(39) £9,223 for a study in the Department of Physics and Astronomy of the atomic data required for astrophysics research.

(40) £9,103 for a study in the Department of Physics and Astronomy of interstellar spectra.

(41) £7,987 for the Department of Physics and Astronomy under an agreement with Rutherford High Energy Laboratory for the development of instrumentation for coherent scattering experiments.

(42) £7,913 for the Department of Physics and Astronomy for an analysis of ultra-violet data from S-68 experiment.

(43) £7,903 for the Department of Physics and Astronomy for a study of the collapse of interstellar gas clouds.

(44) £5,100 for research in the Department of Physics and Astronomy on atom-atom scattering and applications to spectral line broadening.

(45) £4,729 for the Department of Physics and Astronomy for speckle interferometry and spectrophotometry of very faint quasi-stellar objects.

(46) £3,253, £1,514 and £1,254 for research in the Department of Physics and Astronomy on ground-based infra-red astronomy at Tenerife.

(47) £3,201 for the Department of Physics and Astronomy for soft X-ray space studies.

(48) £545 for the Department of Physics and Astronomy for a study of stellar chromosphere.

(49) £500 for a study in the Department of Physics and Astronomy of emission line profiles of N-type galaxies and quasars.

(50) £270 and £270 for the Department of Physics and Astronomy for infra-red spectroscopy of planetary nebulae and H_2 regions.

(51) £153 for the Department of Physics and Astronomy for infra-red astronomical observations in the Southern Hemisphere.

(52) £97 for the Department of Physics and Astronomy in support of a senior visiting fellowship.

(53) Research training support grants totalling £30,877.

SMITH KLINE AND FRENCH LABORATORIES LIMITED

(1) £10 for the Faculty of Medical Sciences for a Sessional Prize (Part I—Anatomy, second prize) to be known as the 'Smith Kline and French Prize'.

(2) $10,000 in support of research in the Department of Pharmacology.

SOCIAL SCIENCE RESEARCH COUNCIL

(1) £4,111 for research in the Department of Anthropology on a typology of budgetary systems intended to relate anthropology to economics.

(2) £806 for a study in the Department of Anthropology of economic anthropology—the effect of social monitoring on the elasticity of consumption, with respect to changes in income.

(3) £85 for a study in the Department of Anthropology of the hunting and gathering economy as an elementary mode of production.

(4) £3,850 for a study in the Department of English Language and Literature of formal and semantic properties of questions in spoken English.

(5) £5,896 for a study in the School of Environmental Studies of the effects of interactive video telecommunications systems upon non-verbal processes.

(6) £3,533 for the School of Environmental Studies for a quantitative reassessment of residential overcrowding standards and the housing stress index.

(7) £745 for the Department of Geography for the preparation of an inventory of research in resource management.

(8) £887 for the School of Library, Archive, and Information Studies for the preparation of a catalogue, calendar and handlist of the archives of Karl Pearson.

(9) £49,715 and £267 for research in the Department of Psychology on legibility criteria for the efficient use of maps.

(10) £7,496 for a study in the Department of Psychology of the discrimination problems of readers.

(11) £6,102 for the Department of Statistics and Computer Science for applied decision analysis research.

(12) £600 and £332 for an experimental study in the Department of Psychology of the cognitive processes and the educational attainments of socially-handicapped children.

(13) Research training support grants totalling £45.

SPORTS COUNCIL

£500 for a study in the Department of Psychology of the effects of exercise on middle-aged man.

STANDARD TELECOMMUNICATION LABORATORIES LIMITED

£1,000 for a study in the Department of Electronic and Electrical Engineering of thin film optic guiding structures.

SWEDISH TELECOMMUNICATIONS CENTRAL ADMINISTRATION

£5,700 for the School of Environmental Studies for a study of person-to-person audio teleconference facilities.

SWEET AND MAXWELL LIMITED

An annual prize of publications of Messrs Sweet and Maxwell Limited to the value of £50, to be known as the 'Maxwell Law Prize', to be awarded to the student who has shown the greatest proficiency in the examination for Part II of the LL.B. Degree.

TIN RESEARCH INSTITUTE

£900 for a research studentship in the Department of Chemistry.

UNITED KINGDOM ATOMIC ENERGY AUTHORITY

(1) £10,906 for research in the Department of Chemical Engineering on macromolecular separations.

(2) £3,647 for a study in the Department of Physics and Astronomy of optical emissions from ions following passage through stripping media.

UNITED STATES AIR FORCE

$3,000 for the Department of Physics and Astronomy for the determination of air density temperature and winds at high altitude.

UNITED STATES ARMY

$10,000 for research in the Department of Electronic and Electrical Engineering on microwave scanning and acoustic surface wave holographic techniques for non-destructive testing.

UNITED STATES PUBLIC HEALTH SERVICE

(1) $14,073 for research in the Department of Anatomy and Embryology on sensory and motor aspects of respiration.

(2) $1,000 for a fellowship supply allowance in the Department of Anatomy and Embryology.

(3) $8,454 for a study in the Department of Human Genetics and Biometry of the growth and development of Melanesian children.

(4) $1,000 for a fellowship supply allowance in the Department of Statistics and Computer Science.

(5) $1,000 for a fellowship supply allowance in the Department of Zoology and Comparative Anatomy.

UNIVERSITY OF CONNECTICUT

$2,500 for research in the Department of Animal Genetics on molecular shape and teratogenic specificity.

UNIVERSITY OF PENNSYLVANIA

$2,500 for the Department of Biochemistry for computer services.

THE WELLCOME FOUNDATION LIMITED

(1) £30 for the Faculty of Medical Sciences for a Sessional Prize (Part II—Human Biology) to be known as the 'Wellcome Prize'.

(2) £42 for the Department of Pharmacology in support of a postgraduate studentship.

(3) £84 for the Department of Zoology and Comparative Anatomy in support of a postgraduate studentship.

THE WELLCOME TRUST

(1) £26,260 for research in the Department of Anatomy and Embryology on hippocampal function.

(2) £2,085 for research in the Department of Anatomy and Embryology on the brain synapses.

(3) £144 for the Department of Anatomy and Embryology for studies of the innervation of the gut.

(4) £3,570 for a research fellowship for the Sub-Department of the History of Medicine in the Department of Anatomy and Embryology.

(5) £2,240 for a research training scholarship in the Sub-Department of the History of Medicine in the Department of Anatomy and Embryology.

(6) £638 in support of a research training scholarship for the Sub-Department of the History of Medicine in the Department of Anatomy and Embryology.

(7) £72 for research in the Department of Animal Genetics on the role of antiteratogens in congenital deformities.

(8) £4,437 for a study in the Department of Biochemistry of the initiation of lacto-genesis and the control of milk formation.

(9) £3,438 for the Department of Biochemistry for an estimation of the kinetic parameters of the glyolytic enzymes.

(10) £925 for a research training scholarship in the Department of Biochemistry.

(11) £7,059 for a Japanese research fellowship in the Department of Biophysics.

(12) £216 for research in the Department of Chemistry on the structure and packing of membrane components.

(13) £7,434 for research in the School of Library, Archive, and Information Studies on the Galton archives.

(14) £281 and £20 for the Department of Pharmacology in support of research in drug allergy.

DR T. D. WHITTET

£9 per annum for seven years for the Faculty of Medical Sciences for a Sessional Prize (Part II—Pharmacology, second prize) to be known as the 'Dr T. D. Whittet Prize'.

THE WOLFSON FOUNDATION

An additional grant of £7,000 to enable improvements to be made to the Health Centre building.

JOHN WYETH AND BROTHER LIMITED

£50 for the Faculty of Medical Sciences for a Sessional Prize (Part II—best aggregate performance) to be known as the 'Wyeth Prize'.

BENEFACTIONS AND DONATIONS TO THE LIBRARY

THE HON. DAVID ASTOR

The gift of the standard English edition of the collected works of Freud.

DR B. K. BLOUNT AND MR C. H. CORBETT-PALMER

The gift of the papers of Sir Gavin de Beer, 1890–1972, Professor of Embryology at University College London, 1945–1950, presented by Lady de Beer's literary executors. The papers reflect the wide range of Sir Gavin's interests, and include even more on literature and history than on zoology and other scientific subjects.

MRS K. HAJNAL-KÖNYI

A gift of 300 items, mainly of English and German classic works on structures, which had belonged to her late husband, Dr Kalman Hajnal-Könyi, consultant structural engineer.

KRAUS REPRINT CORPORATION AND THE SOCIETY OF AUTHORS

The gift of complete sets of the reprint editions of the *Egoist*, the *Little Review*, and *Transition* for the James Joyce Centre.

MRS MAEVE PEAKE

The deposit of the papers of her late husband, Mervyn Peake. These include the manuscripts of *Titus Groan*, *Gormenghast* and *Titus Alone*, the drafts of an unpublished novel 'Titus IV' and of a dramatic version of the Titus trilogy, and some correspondence.

LIBRARY OF THE SWEDISH INSTITUTE, LONDON

A gift of some 100 volumes mainly of modern Swedish literature.

THE LIBRARY OF THE WARBURG INSTITUTE

A gift of 60 volumes on the history of art.

APPENDIX XIV

COLLEGE ACCOUNTS 1973–74

The Balance Sheet and the Income and Expenditure Account for the year will be found on pages 161–3.

BALANCE SHEET

LIABILITIES

The Capital Account increased by £215,500. This increase is mainly attributable to the occupation of the Shenley Pavilion and receipt of capital grants in respect of 49–55 Grafton Way and Whitfield Street.

ASSETS

Freehold and Leasehold Land and Buildings increased by £144,015, reflecting the completion of the Shenley Pavilion and the termination of the leases of 11 Albany Street and 10 Hanover Terrace.

TRUST FUNDS

The College holds endowments in the form of 212 separate trust funds with a total value of £1,476,901. The funds yielded a total income of £127,000.

INCOME AND EXPENDITURE

The income for the year exceeded expenditure by £210,480 after making provision to meet increases in London Weighting for technical, secretarial and ancillary staff. The balance carried forward on the Income and Expenditure Account was £209,151 (£1,329 adverse balance in 1972–73).

Income exceeded that for 1972–73 by £922,437. Grants from the Court of the University increased by £821,321. Fees increased by £14,190 and grants for research increased by £70,825.

Expenditure, including allocations to and from Reserves, was £528,726 more than in 1972–73. An additional £503,647 net was spent on academic departments and services. Maintenance of Premises cost an additional £83,060 net. An additional £65,526 net was spent on administration, and miscellaneous expenditure decreased by £123,507 net, mainly attributable to the withdrawal of Selective Employment Tax.

Income and expenditure under the main classifications in 1973–74 as compared with 1972–73 and with the corresponding year of the previous quinquennium, are shown in the following table.

EXPENDITURE	1968–69 £	%	1972–73 £	%	1973–74 £	%
Salaries and Pensions of Teaching Staff	2,189,104	35·7	3,442,553	34·0	3,802,098	35·7
Departmental Expenses, including Library	1,313,474	21·4	2,536,339	25·0	2,609,616	24·4
Research Grants ..	1,023,031	16·7	1,618,496	16·0	1,689,321	15·9
Maintenance of Premises ..	894,309	14·6	1,374,004	13·6	1,457,064	13·7
Administration ..	361,448	5·9	633,872	6·2	699,398	6·5
Selective Employment Tax	186,924	3·0	89,126	0·9	—	—
Other	164,568	2·7	437,050	4·3	402,669	3·8
	£6,132,858	100·0	£10,131,440	100·0	£10,660,166	100·0
INCOME						
Endowments ..	78,963	1·3	91,591	0·9	113,898	1·1
Grants	4,187,979	68·0	7,312,972	73·5	8,134,293	74·8
Donations	137,646	2·2	244,575	2·5	260,317	2·4
Fees	386,836	6·3	452,652	4·5	466,842	4·3
Grants for Research	1,023,031	16·6	1,618,496	16·3	1,689,321	15·5
Research Training Support Grants ..	45,101	0·7	45,962	0·5	46,461	0·4
Selective Employment Tax	186,924	3·0	89,126	0·9	—	—
Other	115,068	1·9	92,835	0·9	159,514	1·5
	£6,161,548	100·0	£9,948,209	100·0	£10,870,646	100·0

EXTRA-BUDGETARY ACTIVITIES

The College administers the finances of many research projects supported from outside sources. 500 were being pursued actively at 31 July 1974. Income and expenditure increased from £1,618,496 in 1972–73 to £1,689,321 in 1973–74.

CAPITAL GRANTS

Capital grants made during the year 1973–74 were as follows:	£
New building at 2–10 Euston Buildings for Eugenics, Biometry and Genetics: Building work	4,160
Chemistry Building Stage I: Building work	24,988
Conversion of Chaucer House and former National Central Library: Building work	1,616
Central Collegiate Building Stage I: Building work	4,988
Increase in cost (S.E.T.)	5,012
Subsidy in aid of loan financed residence scheme: 20–24 Taviton Street	30,655

Provision of accommodation for increased student intake—superstructure for Anatomy Dissecting Room: Building work	695
Purchase of 49–55 Grafton Way: Professional fees	457
Alterations in Main Building—Library: Professional fees	102
	£72,673

SCHOLARSHIPS AND PRIZES

Expenditure amounted to £39,150. Awards were made as under:

	Undergraduate	*Postgraduate*
	£	£
From Endowments	4,609	6,727
„ Donations	—	21,548
„ General Income	3,583	2,683
	£8,192	£30,958

UNIVERSITY COLLEGE LONDON

BALANCE SHEET 31 JULY 1974

31.7.73 £		£
15,399,559	CAPITAL ACCOUNT	15,615,059
30,474	REDEMPTION FUND	32,253
46,472	LOANS	8,693
15,476,505		15,656,005
1,857,152	RESERVES AND AMOUNTS SET ASIDE	1,916,820
869,414	EARMARKED FUNDS	564,641
953,011	CURRENT LIABILITIES	1,347,980
19,156,082		19,485,446
1,796,900	TRUST FUNDS	1,476,901

NOTE

Freehold and Leasehold Land and Buildings

(*a*) Freehold and Leasehold land and buildings as stated in the accounts does not include fixtures, furniture and equipment. The cost of these assets is written out of the accounts on purchase or on completion of a Project against the corresponding grants or other monies received which are not therefore included in Capital Account.

(*b*) Freehold land and buildings are stated at valuation made in 1959 on the basis of the then current land values and building costs; additions since are stated at cost or valuation, as estimated by the College authorities.

(*c*) There are commitments for future expenditure on capital projects which amount to £165,000 at 31 July 1974 (*1973 £980,000*).

£20,862,982		£20,962,347

31.7.73 £		£
15,284,530	FREEHOLD LAND AND BUILDINGS—See Note below	15,435,446
390,107	LEASEHOLD LAND AND BUILDINGS	383,206
15,674,637		15,818,652
67,072	CAPITAL AND OTHER WORKS IN PROGRESS	—
1,016,513	INVESTMENTS at Lower of Cost and Market Value .. (*Market Value at 31 July 1974, £859,726; 31 July 1973, £1,016,513*)	859,726
905,272	EXPENDITURE RECOVERABLE FROM FUTURE GRANTS	1,151,480
1,492,588	CURRENT ASSETS	1,655,588
19,156,082		19,485,446
1,706,900	TRUST FUNDS	1,476,901

£20,862,982		£20,962,347

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 JULY 1974

EXPENDITURE

1972–73 £		£	£
	Administration		
490,044	Salaries	550,433	
112,172	Advertising, Printing, Stationery, Postage and Telephone	120,016	
21,656	Other Expenses (including Professional Fees)	28,949	
(623,872)			699,398
	Academic Departments		
3,370,644	Salaries of Teaching Staff	3,713,901	
1,120,251	Departmental Wages: Technical Staff	1,229,360	
275,905	Secretarial Staff	329,408	
571,444	Departmental and Laboratory Maintenance	705,340	
1,618,496	Research Expenditure covered by grants on Research Contracts (contra opposite)	1,689,321	
5,541	Other Expenditure	6,817	
(6,962,281)			7,674,147
	Academic Services		
	Libraries: Salaries 192,233		
295,205	General Expenditure 160,643		
		352,876	
8,228	Central Photographic Service	10,102	
6,380	Audio Visual Aids	5,744	
7,613	Radiation Hazards	8,464	
2,574	Miscellaneous	719	
3,125	Small Group Teaching	2,864	
(323,125)			380,769
	Maintenance of Premises		
304,533	Rates (including £123,892 recoverable)	314,676	
25,542	Insurance	28,990	
	Rents and other payments for use of buildings:		
	Halls of Residence 24,196		
110,496	Other Buildings 60,440		
		84,636	
257,138	Heat, Light, Water and Power	261,672	
484,469	Repairs and Maintenance and Buildings including amounts set aside for long-term maintenance	556,132	
124,266	Wages of Porters and Attendants	140,787	
18,502	Other Expenses	19,195	
(1,324,946)			1,406,088
	General Educational		
2,229	Examinations	1,497	
34,652	Scholarships and Prizes	39,150	
1,691	Public Lectures	1,294	
6,000	Staff Attendance at Conferences	8,000	
37,163	Student Vacation Grants	39,214	
3,010	Miscellaneous	9,230	
(84,745)			98,385

INCOME

1972–73 £		£	£
	Endowments		
91,591	Income of Trust Funds appropriated for purposes specified by Trusts against expenditure included opposite		113,898
	Donations and Subscriptions: Appropriated for:		
1,586	Libraries	481	
17,235	Scholarships and Bursaries	21,547	
170,497	Salaries and Superannuation	158,542	
55,257	Departmental and Laboratory Maintenance	79,747	
(244,575)			260,317
	Grants from University Court		
7,007,005	General	7,025,000	
	Supplementary	516,300	
			7,541,300
	Earmarked:		
—	Academic Salary Revision 1973 Scheme	158,224	
—	Clinical Salary Revision 1973 Scheme	1,427	
—	Academic Threshold and London Weighting	46,586	
304,533	Rates (including £123,892 recoverable)	314,676	
784	Hayter Committee	1,356	
650	Parry	5,411	
—	University College/Royal Free Medical Project—Administration	7,000	
—	M.Sc. Course in Ergonomics	10,025	
—	Former Institute of Computer Science	48,288	
(305,967)			592,993
45,962	**Research Council Training Support Grants**		46,461
452,652	**Fees**		466,842
1,618,496	**Grants for Research**, including research contracts (contra opposite)		1,689,321
25,644	**Contributions for Services Rendered**		30,170
16,724	**College Properties**—Rents received		20,004
	Other Items		
21,027	Special Funds Appropriation	23,407	
19,284	Interest Receivable	73,902	
10,156	Miscellaneous	12,031	
(50,467)			109,340
89,126	**Selective Employment Tax** (contra opposite)		—

	STUDENT FACILITIES AND AMENITIES			
65,650	Grant to Students Union		70,800	
—	Central Collegiate Building		2,180	
3,382	Salaries: Wardens of Halls of Residence		3,556	
32,595	Student Health Service		37,078	
2,298	Students' Purposes Fund		3,102	
677	Crabb Robinson and Ealing Hall Funds		758	
6,969	Central Admissions Scheme		8,232	
2,456	Miscellaneous		2,373	
10,061	Careers Office		4,375	
6,292	Student Counsellor Service		6,416	
(130,380)				138,870
	MISCELLANEOUS			
71,909	Staff Pensions		88,197	
2,991	Grants from Benevolent Funds		3,217	
3,455	Interest on Overdrafts, etc		5,925	
14,238	Sundries		16,791	
1,600	Refectory: College Subvention		1,867	
89,126	Selective Employment Tax (contra opposite)		—	
6,200	College Collection		—	
(189,519)				115,997
25,430	CAPITAL EXPENDITURE NET FROM INCOME			41,163
				10,554,817
	PROVISION FOR LONDON WEIGHTING			
—	(Excluding Academic Staff)			87,635
				10,642,452
	ALLOCATION TO RESERVES AT 31 JULY 1974			
40,000	College Fund			—
	Revenue Grants:			
10,000	Administrative Staff Training		10,000	
	Departmental and Laboratory Maintenance	263,564		
	Less: Allocation withdrawn	27,839		
304,623			235,725	
50,339	Academic Services		20,023	
39,581	Repairs and Maintenance of Building		72,547	
127,240	Minor Works		125,713	
7,367	Student Vacation Grants		3,953	
—	Miscellaneous		8,825	
	Development Programme:			
45,000	Relocation and Other Costs		44,000	
(584,150)				520,786
7,875	Small Group Teaching (earmarked funds)			5,011
10,296,323				11,168,249
—	EXCESS OF INCOME OVER EXPENDITURE FOR THE YEAR			231,022
£10,296,323				£11,399,271
	REFUND OF OVERCLAIMED RATES RELATING			
—	TO PRIOR YEARS			20,542
	Excess of Expenditure over Income for the			
183,231	*Year*			—
(1,329)	Balance 31 July 1974 carried to Reserve			209,151
£181,902				£229,693

	ALLOCATIONS FROM RESERVES AT 1 AUGUST 1973		
	Revenue Grants:		
—	Administrative Staff Training	10,000	
	Departmental and Laboratory		
107,998	Maintenance	304,623	
3,766	Academic Services	50,339	
498	Repairs and Maintenance	39,581	
32,890	Minor Works	127,240	
8,731	Student Vacation Grants	7,367	
	Development Programme:		
—	Relocation and Other Costs	45,000	
	Balance at 1 August 1973	584,150	
	Less: Transfer to Earmarked Grants:		
	Equipment	60,000	
	Furniture	3,400	
		63,400	
			520,750
11,000	Small Group Teaching		7,875
183,231	*Excess of Expenditure over Income for the Year*		—
£10,296,323			£11,399,271
181,902	Balance as at 1 August 1973		(1,329)
—	Excess of Income over Expenditure for the Year after making allocations (net) to Reserves of £7,172		231,022
£181,902			£229,693

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